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# Flourishing Partners: Leveraging Positive Psychology in a Peer Support Model to Promote Well-being for Recovering Addicts

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## Abstract

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## Keywords

positive psychology, positive interventions, well-being, addict, addiction, addiction treatment, recovery, relapse, personal narrative, meaning, meaning-making, posttraumatic growth, social support, social connection, positive relationships, peer support, treatment, therapy

## Disciplines

Psychology

# Flourishing Partners: Leveraging Positive Psychology in a Peer Support Model to Promote Well-being for Recovering Addicts

Carolyn Biondi

University of Pennsylvania

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Advisor: Dan Tomasulo, Ph.D., TEP, MFA, MAPP

August 1, 2019

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## Abstract

Substance use disorders are a widespread problem in the United States. In 2017, 19.7 million Americans aged 12 and over struggled with substance abuse, with 74% of those affected suffering from alcohol use disorder and 38% from an illicit or illegal drug disorder (Substance Abuse and Mental Health Services Administration, 2017). Despite its power over individuals, addiction can be treated and managed through abstinence and healthy behavior, and there is opportunity to develop new approaches to augment traditional addictions treatment. Positive psychology, the scientific study of what makes life worth living (Seligman, 2011), offers rich potential to support individuals recovering from addiction to learn to thrive. A peer support model to help individuals to leverage positive relationships to cultivate positive emotion, meaning, engagement and growth is proposed as a modality to support a transformation into flourishing. Thirteen interventions are offered, as well as a guide to their implementation.

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> I have absolutely no pleasure in the stimulants in which I sometimes so madly indulge. It has not been in the pursuit of pleasure that I have periled life and reputation and reason. It has been the desperate attempt to escape from torturing memories, from a sense of *insupportable loneliness* and a dread of some strange impending doom.
>
> — Edgar Allan Poe, *Life and Poems*

> Blinding pain just to get through the day, keeping my feelings locked under the surface. Don't know when it became this way. At some point the pressure peaked and lit a fuse that no amount of alcohol could dampen or subdue. How could I stay numb as I'd always done, in the waking nightmare my life had become? No escape in dreams, not in sleep, no rest. Just to wake again in pain and shame and begin again.
>
> — Carolyn Biondi, "Numb"

## Introduction

What is addiction, and why do individuals remain addicted if its consequences are so destructive? The Merriam-Webster dictionary defines addiction (2019) as "compulsive need for and use of a habit-forming substance (such as heroin, nicotine or alcohol), characterized by tolerance and by well-defined physiological symptoms upon withdrawal." In other words, an addicted individual has a strong urge for a substance (compulsion), lacks self-control to abstain from using the substance (dependence or habit), needs more of the substance to produce the same effect (tolerance), and has an adverse reaction to discontinuing use of the substance (withdrawal).

While defining addiction is fundamental to understanding it, the opening quotes here provide insight into the deeply painful physical, psychological and emotional impact of addiction on the individual caught in its throes. As the quotes indicate, addicted individuals often face a crisis

of meaning, lacking a sense of redemption from painful past experience, supportive relationships and positive emotion, with little hope for the future. It is a debilitating and progressive disease that, if left untreated, destroys lives, with the very real possibility of taking life prematurely (American Society of Addiction Medicine, 2011).

Despite its power over individuals, addiction can be treated and managed through abstinence and healthy behavior. In 2012, approximately 10% of all American adults, or 23.5 million people, consider themselves to be recovering from a drug or alcohol abuse problem, showing the breadth of the problem in our society and giving hope for recovery (Rondó & Feliz, 2012). Nonetheless, 40 – 60% of individuals treated for addiction subsequently relapse into substance use (McLellan, Lewis, O'brien, & Kleber, 2000). While studies have shown the efficacy of current treatment models, given the prevalence of addiction, its serious nature, and high relapse rates, there is opportunity to support what is working with new approaches.

One new approach that has rich potential to augment traditional addictions treatment is positive psychology, the scientific study of what makes life worth living, or how human beings come to flourish (Seligman, 2011). Following a long-standing orientation to the negative by twentieth century psychologists, it could be said that we stand on the doorstep of a eudaimonic turn in western culture that embraces the principles of positive psychology (Pawelski & Moores, 2013). This eudaimonic turn, or shift to valuing well-being, focuses on the positive aspects of the human psyche and life context, and attempts to overcome our bias toward negativity. It conceives that our negativity bias to perceive threat does not always serve us and that our capacity for positivity is underutilized (Pawelski & Moores, 2013).

In this critical moment for western culture, substance-addicted individuals are often genetically predisposed to the condition and have experienced negative life events that further increase their vulnerability to it (National Institute on Drug Abuse, 2018). Mainstream approaches to addiction such as the twelve steps of Alcoholics Anonymous (AA) and cognitive-behavioral treatment (CBT) are helping millions of individuals to achieve abstinence (Bohlman, 2018; Walker, 2018). There is opportunity for positive psychology to provide tools to help recovering individuals build on personal strengths and foster personal development. In doing so, they may not only survive in the aftermath of addiction, but also come to thrive and lead flourishing lives.

The resources found in a peer support model, which can help individuals to leverage positive relationships to cultivate positive emotion, meaning, engagement and growth, could be an effective modality to support a transformation into flourishing for individuals recovering from addiction. Peer support has been used with recovering individuals through AA and in therapeutic treatment settings (Walker, 2018; Elkins, 2018), although there has been little research into the use of peer support with positive psychological interventions. The model outlined in this paper is a step toward this goal. Here I explore what is known about the causes and consequences of addiction, examine current treatment models for addiction, provide an overview of positive psychology principles, and offer a peer-support model to apply positive psychology to support recovering individuals on a path to well-being.

## Epidemiology of Addiction and Substance Use Disorder

### Definitions of Addiction

**Historic definitions**. While addiction has afflicted humans dating back to ancient civilization (Ancient Facts, 2015), it is only in the past fifty years that the modern-day professional

mental health community has sought to define the condition of an individual's abuse of and dependence on psychoactive substances as a primary mental health condition, rather than a symptom of another pathology (Robinson & Adinoff, 2016). Societies across the world have grappled with whether substance use is normative or undesirable, with examples of sanctioned and common use of substances abounding. Researchers note that use of opium was as commonplace in 19th century Europe and America as is the use of aspirin today (Robinson & Adinoff, 2016). In 1885, father of psychoanalysis Sigmund Freud proclaimed that cocaine was not addictive, suggesting its palliative use (Robinson & Adinoff, 2016). As recently as 2010, the United Stated Department of Agriculture established health guidelines for moderate consumption of alcohol at one drink per day for women and two drinks per day for men (Robinson & Adinoff, 2016). In addition, the production of substances, including cannabis, opioids and alcohol, make up one of the world's leading economies (Robinson & Adinoff, 2016). These examples highlight an ongoing social tension to balance a human desire to consume psychoactive substances with our propensity to overindulge in substances to the detriment of ourselves and society as a whole.

The societal struggle to define when substance use has tipped from normative into abuse and addiction is reflected in the history of the mental health professional community's approach to issues with substances. To track the evolution of the scientific identification of the disease and the terminology relating to it, we may look to the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed., *DSM-V*), a taxonomic and diagnostic tool used across the mental health professional community to classify mental disorders (American Psychiatric Association [APA], 2013). In the first version of the *DSM* published in 1952, the problem of substance use is termed "alcoholism" and "drug addiction," with the word addiction in reference to substances then disappearing from the diagnosis terminology until the most recent version, the *DSM-V*, published in

2013 (Robinson & Adinoff, 2016). The diagnosis of substance use disorder, also classified as substance abuse and substance dependence, as a primary diagnosis not dependent on another underlying disorder, appeared for the first time in the *DSM-III*, published in 1980 (Robinson & Adinoff, 2016). In the later revised version of the *DSM-III*, the term *addiction* appears only once, in reference to sexual disorders, with no specific definition (APA, 1987; Goodman, 1990). Only in the most recent version, the *DSM-V* published in 2013, does the classification appear as "Substance-Related and Addictive Disorders," bringing together for the first time the terminologies of substance use disorder and addiction (APA, 2013, p. 481). Given this development in the classification, for the purposes of this paper, the term addiction is used interchangeably with substance-related disorder.

**Current definition.** The *DSM-V* defines the diagnosis criteria for Substance-Related and Addictive Disorders as problematic use of one or more substances from 10 drug classes (see list below) resulting in clinically significant impairment or distress as manifested by two or more symptoms occurring within a 12 month period (APA, 2013). According to the *DSM-V*, substances to which an individual may become addicted include: alcohol; cannabis; phencyclidine and other hallucinogens; inhalants; opioids; sedatives, hypnotic or anxiolotic; stimulants, including amphetamines and cocaine; tobacco; and other or unknown substances (APA, 2013, Medina, 2016).

Individuals may experience substance abuse disorders on a continuum of severity from mild or moderate to severe, depending on the number of symptoms present (APA, 2013; Medina, 2016). Symptoms as defined by the *DSM-V* include: 1) consuming more of the substance than originally planned; 2) consistently failed efforts to control substance use; 3) spending large amounts of time using the substance, or doing whatever is necessary to obtain them; 4) failing to

fulfill life obligations due to substance use; 5) "craving" the substance; 6) continuing use of substance despite negative impact on health or mental health; 7) continuing use despite negative impact on relationships; 8) repeated use of substance in dangerous situations; 9) using substance rather than engaging in other activities; 10) building tolerance to the substance or requiring more of the substance for the same effect; and 11) experiencing physical and mental withdrawal symptoms after stopping use (APA, 2013; Medina, 2016). To qualify for the diagnosis, individuals must exhibit two or three of 11 symptoms or behaviors within 12 months, considered a mild disorder, while the presence of four to five symptoms is considered moderate, and six or more symptoms severe disorder (APA, 2013; Medina, 2016).

**Prevalence of Addiction**

Substance use disorders are a widespread problem in the United States. In 2017, 19.7 million Americans aged 12 and over struggled with substance abuse, with 74% of those affected suffering from alcohol use disorder and 38% from an illicit or illegal drug disorder (Substance Abuse and Mental Health Services Administration [SAMSHA], 2017). One in eight of these adults suffered from alcohol disorder and another substance use disorder concurrently, and almost half, or 8.5 million adults, experienced both a substance use disorder and a mental health disorder (SAMSHA, 2017), highlighting the interaction between addiction and mental health problems.

Alcohol is one of the most commonly used and socially accepted psychoactive substance, and as such, accounts for the highest levels of abuse. In 2014, 52.7 percent of Americans reported current use of alcohol, with 6.4 percent of people age 12 or older having a past-year alcohol use disorder (Robinson & Adinoff, 2016). Excessive use of alcohol is the third preventable leading cause of death in the United States, and over 200 diseases and health-related conditions

are associated with excessive alcohol use (Robinson & Adinoff, 2016). Despite the prevalence of alcohol abuse, recent research demonstrating its potential benefits when consumed in moderation, including decreased risk of diabetes, stroke, and heart disease, have influenced social norms and definition of acceptable moderate use (Robinson & Adinoff, 2016).

In recent years the ease of production of synthetic opioids, including heroin and oxycodone, has led to their widespread availability and abuse, despite the fact that they are either illegal or controlled substances, depending on the form they take (Robinson & Adinoff, 2016). In 2010, researchers estimated that 12 million Americans age 12 or older reported nonmedical use of prescription painkillers during the past year (Robinson & Adinoff, 2016). In a 2007 study, the adverse outcomes of opioid use were measured by emergency department visits, nearly 600,000 annually, and by cost to health insurers, estimated at $72.5 billion dollars annually (Mahon, 2007).

**Impact of Addiction**

Addiction has a widespread negative impact on individuals and communities, and creating a comprehensive definition of the many harms of addiction has proven challenging (Nutt, King & Phillips, 2010). Recognizing the complexity of addiction and the harm it causes, in 2010 a group of British practitioners and researchers from the field of addiction sought to define the physical, psychological and social consequences of drug use through a multicriteria decision analysis (MCDA) (Nutt, et al., 2010).

Regarding negative impact of addiction on the individual, Nutt and colleagues (2010) identified nine outcomes: mortality from overdose; shortened lifespan resulting from accidents, disease and suicide; damage from drug use including physical disease such as stroke and cirrho-

sis; related health consequences, such as self-harm and unintended injury; drug dependence; impaired mental functioning including intoxication and psychosis; secondary consequences of drug use on mental functioning such as mood disorders; loss of tangibles such as job loss, poor educational outcomes, homelessness and imprisonment; and loss of relationship with family and friends.

In terms of negative impact on an addicted individual's family, community, and broader society, Nutt and colleagues (2010) identified seven areas of harm: injury, both direct (such as violence and accidents) and indirect (such as fetal damage and transmission of disease); drug-related crime; environmental damage, including pollution from amphetamine production and waste such as used needles; family breakdown and child abuse and neglect; international damage such as deforestation and destabilization of political structures; economic costs including costs relating to healthcare and judicial systems and loss of economic productivity; and declines in community functioning and cohesion.

The 2010 study by Nutt and colleagues offers a global definition of the harm of addiction and sheds light on the deeply destructive effects on the individual and the individual's family and friends, as well as the far-reaching negative impact on society. Other studies have estimated the financial cost of substance abuse disorders in the United States at $740 billion annually, accounting for healthcare, lost work productivity and crime (National Institute on Drug Abuse, 2017). With millions of Americans suffering from addiction and causing harm to themselves, their families, communities and our society at large, it is helpful to understand the causes of addiction and what can be done to stem its course from biological, psychological and environmental perspectives.

## Etiology of Addiction: Theory and Research

Over the past two centuries, social theory on the causes of alcohol and drug addiction have ranged broadly, including viewing intoxication as a sinful vice and indication of moral degeneration, with addicts as "unproductive social outcasts," and linking substance abuse with criminal behavior and lower social class (Robinson & Adinoff, 2016, p. 3). Scientific investigation of the disease has sought to uncouple the causes of addiction from such moral doctrine, with several perspectives most closely examined: genetics, personality and character traits, cognitive functioning, and environment. Some of the latest work by practitioners and researchers bring these areas of study together into comprehensive theory, outlined below.

**Biological Perspective: Genetics**

Scientists have estimated that genetics account for 40-60% of individual risk for addiction (National Institute on Drug Abuse, 2018). A 2008 study reviewed evidence from family, adoption and twin studies to understand the relationship between genetic makeup and addiction (Agrawal & Lynskey, 2008). A moderate to high correlation between genetic factors and addiction, ranging from 0.30 to 0.70, was established, with the interplay of environment also considered to be an important element to the development of addiction. The authors recommend further study of twins and the children of twins, with sufficient power to examine gene-environment interaction and illuminate the impact of genetics on addiction.

While evidence supports the influence of genetics on addiction, scientists have not fully established genetic markers for addiction. One of the most prominent studies attempting to pinpoint a genetic risk factor for addiction reviewed data on abusers of stimulants, opiates, alcohol and 3,4-methylenedioxymethamphetamine (MDMA) and found evidence that the psychological construct of impulsivity may be a pre-existing vulnerability marker for substance use disorders (Verdejo-García, Lawrence, & Clark, 2008). Impulsivity can be defined as maladaptive behavior

characterized by little or inadequate planning or forethought (Evendeen, 1999) and considered to be a stable trait of personality resulting from a disruption in cognitive processes considered to be normal and healthy (Verdejo-García et al., 2008). No specific genetic marker is identified in the research.

While scientists continue to investigate genetic predisposition for addiction, the study by Verdejo-García and colleagues (2008) demonstrates that identifying specific genetic markers has proven elusive, subsequently leading to a consideration of stable personality traits that may be heritable.

**Stable Traits Perspective: Personality and Character**

The trait theory of personality, originally developed by personality psychologist Gordon Allport in the 1930s, proposes that characteristics of human personality are relatively stable within an individual and vary normatively across the human population (Cherry, 2019). While scientists have attempted to find a basis for addiction in personality traits and to identify personality features that predispose, precipitate or perpetuate substance abuse and/or dependence, the findings have not been widely replicated, and rather, have suggested that not all addicts are alike.

In the literature on stable traits and addiction, there is some evidence to suggest that alcoholics differ in personality from individuals addicted to narcotics, a term often imprecisely defined but generally referring to derivatives of opium (Mangione & Matoka, 2008). For example, one study showed that alcoholics tend to be depressive, with passive-aggressive personality features, and narcotic addicts tend to possess antisocial, amoral, impulsive, irritable, hostile and psychopathic features (Overall, 1973). In another study, heroin addicts were found to score higher in novelty-seeking, self-directedness, and excitability than alcoholics (Le Bon et al., 2004). A third study showed that methamphetamine abusers tested higher for novelty-seeking, harm

avoidance and self-transcendence, and lower for persistence, self-directedness, and cooperativeness than a control group of healthy individuals (Hosák, Preiss, Halíř, Čermáková, & Csémy, 2004). In summary, while there is some evidence that alcoholics tend to be depressive and passive-aggressive and narcotic addicts tend to be novelty-seeking, excitable, and lacking persistence and cooperativeness, the research seems inconclusive to aptly profile addicts based on personality features.

The research reviewed here suggests that some individuals are predisposed to addiction based on genetic makeup, but we do not fully understand the mechanisms of its heritability, nor are we able predict and treat addiction based on personality traits. A third perspective, that of cognitive function, offers additional insights into the causes of addiction.

**Cognitive Function**

In the 1960's, psychologist Aaron Beck (2005) developed a model for the treatment of depression based on the latest research at the time on how we process information. At the foundation of this cognitive approach is the premise that our thoughts are the basis for our behavior and that errors in our thinking are the root cause of maladaptive behavior (A. T. Beck, 2005). As cognitive psychological science has developed, research has demonstrated that addicted individuals have compromised cognitive executive functions, based in the pre-frontal cortex of the brain, including abstract thinking, motivation, planning, attention to tasks and inhibition of impulsive responses (Crews & Boettiger, 2009; Hester & Garavan, 2004). The overarching challenges created by these cognitive deficits in addicts are poor self-regulation skills and compromised problem-solving capacity (Crews & Boettiger, 2009; Hester & Garavan, 2004; National Institute on Drug Abuse, 1998). The cognitive deficits have been demonstrated to be both predeterminants and consequences of drug and alcohol abuse (Crews & Boettiger, 2009; Hester &

Garavan, 2004).

Cognitive-behavioral psychologists have designed models to correct the cognitive deficits to support recovery from addiction. Marlatt and Donovan (2005) summarize a cognitive behavioral approach to treatment focused on prevention of relapse, including enhancing coping skills, developing self-efficacy, and strengthening motivation. Following the original cognitive model outlined by Aaron Beck (2005), the approach intervenes with strategies to correct for cognitive errors, to respond more adaptively to adversity, to strengthen a sense of control over self and environment, and to minimize damage and negative consequences of substance use (Marlatt & Donovan, 2005). In cognitive behavioral treatment models, addicted individuals can strive to correct cognitive deficits and use their cognitive functions to support recovery through focus and practice.

In summary, underdeveloped and impaired cognitive functions appear to both precipitate and result from substance use, and may be corrected and strengthened through cognitive-behavioral intervention. While there may be strong genetic and biological influences on compromised brain functioning in addicts, the impact of the environment and external events should also be examined to fully understand its impact on cognitive functions and further illuminate the etiology of addiction.

**Environment**

Despite strong predisposition to alcohol and drug abuse based on genetic makeup, hereditability appears to interact with the environment in its expression (National Institute on Drug Abuse, 2018). Research has shown that risk for substance use disorder is heightened for individuals who have experienced a chaotic or abusive home environment while growing up, have

learned unhealthy attitudes toward and use of alcohol or drugs from parents, peers or their community, and have struggled in school (National Institute on Drug Abuse, 2018). In addition, major traumatic life events have been shown to disrupt the natural cycles that support regulation of emotion, development of relationships, sense of self and self-care (Khantzian, 2013). The concept of posttraumatic stress disorder (PTSD), which scholars have described as a failure to heal psychological wounds over time (Khantzian, 2013), is associated with traumatic childhood histories of abuse, neglect and deprivation (Khantzian, 2013), which are also linked with risk for addiction (National Institute on Drug Abuse, 2018). This research highlights the interplay between adverse events and circumstances, particularly in childhood, the disruption of healthy psychosocial development, and the development of addiction.

Just as a poor environment may facilitate expression of addictive behaviors for individuals who are genetically predisposed to the disease, so too can positive environments facilitate change and growth, even at the level of brain functioning. Cognitive scientists are discovering that our brains have *plasticity*; their cellular makeup can change when introduced to new stimuli from our internal and external environments (Hurley, 2014). Brain plasticity offers support for the idea that addicts, shown to have compromised brain function, may improve functioning in environments that support growth and positive change. These findings from cognitive scientists offer hope to individuals, families and communities in their efforts to combat the destructive effects of addiction and promote recovery.

**Bringing Together Biology, Cognitive Function and Environment in Addiction Theory**

Despite the strong influence of hereditability and the impact of negative life events in the development of addiction, individuals may indeed have the power to counteract these influences. One recent theory that supports this idea is the self-medication hypothesis of addictive disorders**,**

based on clinical observation beginning in the 1960s, wherein individuals seek to meliorate pain and discomfort caused by external events through drug use (Khantzian, 2013). Given biological predisposition and adverse life events, addicted individuals revert to the maladaptive behavior of drug use as a result of a number of cognitive vulnerabilities relating to self-regulation, including difficulty regulating emotion or affect, low self-esteem, difficulty with relationships, and poor self-care strategies (Khantzian, 2013).

Studies have shown that painful emotion is a determinant for individuals using, becoming dependent upon, and relapsing to addictive substances (Khantzian, 1997). Problems regulating emotion can come in the form of either being confused or overwhelmed by painful feelings or seeming not to feel emotions at all. When an individual feels powerless, helpless and out of control in the face of confusing or inaccessible emotion, substances are used to relieve suffering and regain a sense of control (Khantzian, 2013). Addiction may be precipitated by painful life events, with substance use as a response to the suffering related to the traumas (Khantzian, 2013).

Positive psychology may provide alternative strategies for relief of suffering through discovery of positive emotions and relationships, life meaning, and engagement to support recovery from addiction. Given the hopeful outlook that our brains are capable of change despite negative influences from genetics and the environment, and the evidence of millions of individuals who have achieved abstinence from prior substance use, it becomes important to understand traditional and current models of addictions treatment. With this context, we can consider how positive psychology can supplement these approaches to enhance well-being for recovering addicts, particularly in a peer support model.

## Treatment of Addiction

**History of Addictions Treatment**

Current treatments for addiction have their origins in the 19th century. Modern modalities for addressing alcoholism, in particular, arose in the 19th century in mutual aid societies such as the Washington Temperance Society and institutionalized treatment, deemed inebriate asylums, evolving in the 20th century into support groups like Alchoholics Anonymous (AA) and modern-day rehabilitation centers (White, 1998).

For most of the 20th century, psychiatrists and psychologists in the mental health professional community had less influence on theory and treatment of addiction than did grass roots movements (Goodman, 1990). The 12-step model of AA, with origins in the 1930s, proliferated as a grass-roots treatment for alcoholism, and later other addictions, with Narcotics Anonymous (NA) established in 1952 (Kurtz, 2010; Narcotics Anonymous, 2019).

Underpinning the AA and related 12-step models is a belief in the powerlessness of the addicts over their substance of choice. The premise implies that a common character flaw among addicts is their perception of being all-powerful and in control (Goodman, 1990). The first of the 12 steps to recovery, then, is for addicts to admit that they are powerless over their chosen substance, and that their lives have become unmanageable. To overcome addiction, addicts must learn to accept their limitations, and in doing so, to begin a path to healing and wholeness (Goodman, 1990).

Within the 12-step model, the addict must also come to understand their connectedness to other addicts. Connection to others with whom the addict shares common challenges and goals is a necessary element to recovery (Goodman, 1990), and a lack of connection to others is a common element in the profile of addicts before entering recovery (Nutt et al., 2010). Peer support,

particularly from sponsors, or individuals who have longer-term abstinence from substances, are an essential component of the 12-step model (Walker, 2018).

Using a collaborative group approach, 12-step programs have been associated with better outcomes for individuals participating in them on an ongoing and consistent basis, as indicated by lasting abstinence from substance use (Fiorentine & Hillhouse, 2000). In designing a peer support model for the application of positive psychology targeted at addicts, the core beliefs in the AA model regarding the concepts of powerlessness, unmanageability and lack of connection can provide an instructive framework help recovering individuals to develop meaning, engagement, positive relationships and positive emotion.

## Current Treatment Models

**Group support**. In the last few decades, the 12-step program model has given way to other variants on group support, including the Secular Organizations for Sobriety (SOS), Rational Recovery (RR) and Self-Management and Recovery Training (SMART Recovery) (Walker, 2018). While 12-step models focus on addiction as a disease, with God or a Higher Power to guide an individual in recovery, alternative groups such as SOS, RR and SMART Recovery forego the religious component of 12-step programs and emphasize individual control over substance use, which might include moderate intake of substances (Walker, 2018). These alternative group models incorporate the teaching of practical skills for self-management that parallel tenets of cognitive-behavioral treatment in professional treatment settings.

Grass-roots peer support models are widely-available, community-based options for millions of individuals seeking to recover from addiction, and they are often integrated into profes-

sional treatment models (Walker, 2018). The combination of group support with individual cognitive-behavioral therapy and holistic approaches in inpatient and outpatient settings constitute the mainstream model of professional addictions treatment today (Walker, 2018).

**Inpatient treatment.** While group models for helping individuals recover from addiction are popular, and there is evidence as to their efficacy, many addicted individuals require treatment at an inpatient facility to undergo detoxification from substances and to begin a life of abstinence (Elkins, 2018). Withdrawal from substances can be life-threatening, and addicted individuals often need medical supervision in a safe environment to clear their bodies of the toxic chemicals in addictive substances (Elkins, 2018). Patients at inpatient facilities benefit from a supportive environment free of substances and protected from life stressors and triggers for their addiction (Elkins, 2018). Services during inpatient treatment focus on education and individual and group therapy conducted by health professionals licensed in the field of addictions treatment (Elkins, 2018). Additional supportive and holistic treatments may include meditation, yoga, acupuncture, physical exercise, art therapy, nutrition therapy and prayer (Gonzales, 2018). Inpatient treatment may last 30 days or several months, depending on the needs of the individual (Elkins, 2018).

**Outpatient treatment.** Individuals who have completed an inpatient program for addiction or those who do not require an inpatient stay to begin recovery may participate in outpatient treatment, often based in cognitive behavioral therapy (CBT). Outpatient therapy may be structured as a full-day program or brief individual or group session, scheduled according to the needs of the individual and progress in recovery from addiction, and may continue indefinitely to support continued recovery (Bohlman, 2018).

**Cognitive behavioral therapy**. Therapy based in cognitive behavioral approaches targets individuals' thoughts, feelings and behaviors, supporting individuals to respond to stressors in more adaptive ways and find pleasure in life without substances (Bohlman, 2018). Cognitive behavioral strategies for enhancing coping, self-efficacy and motivation include motivational interviewing (Miller and Rollnick, 2002) and a transtheoretical approach to behavior change (Prochaska & Diclemente, 1982). The Transtheoretical Model integrates concepts of behavior change from biological, psychological and social perspectives into a comprehensive theory. In the model, the stages of behavior change include pre-contemplation, contemplation, preparation, action, and maintenance, with the individual weighing the pros and cons of current behavior versus changed behavior in the decision-making process (Prochaska, Redding & Evers, 2015). When the pros for a new behavior outweigh the cons, the individual moves along the continuum for behavioral change.

The traditional modality for cognitive behavioral therapy is the dyad relationship of a professional therapist and patient or client. However, the 12-step model and other group treatment models inform the peer support model here, where two or more individuals experiencing a similar mental health challenge, in this case recovery from addiction, support one another in the practice of positive psychological strategies. Theoretical and empirical study of peer support as a support to learning and personal growth in other settings can help to further develop this model.

## Peer Support as a Modality for Learning and Personal Growth

Our peers have a powerful impact on our thoughts and behaviors (Paluck, Shepherd, & Aronow, 2016), and this influence may be leveraged to promote personal change. While 12-step and other addictions recovery groups offer examples of peer-based support that can inform its

use in practicing positive psychology, an overview of research on peer support in a variety of settings can further inform the model.

Broadly speaking, peer support may be defined as social, emotional support, and/or instrumental support that is mutually offered by persons in a similar situation or context (Soloman, 2004). It is a system of giving and receiving help, with respect, shared responsibility and agreement as to what is helpful (Soloman, 2004). Peer support has been correlated with a sense of shared identity, sharing of skills, increased confidence, coping abilities, self-esteem and improved quality of life (Soloman, 2004; Faulkner & Basset, 2012). Other benefits include opportunities for sharing, building relationships and community, skill building, goal setting and mentoring (Jacobson, Trojanowski, & Dewa, 2012). Such relationships can be a means to unlock meaningfulness from within (Berg, Dutton & Wrzesniewski, 2013).

Wisdom from across the ages offers anecdotal support for the efficacy of learning with a designated friend or companion (Golinkoff & Hirsh-Pasek, 2016). For example, the ancient Jewish tradition of *hevruta* encourages collaborative learning of holy texts in pairs. As students debate the meaning of text, they may more deeply understand concepts and integrate them into their lives (Golinkoff & Hirsh-Pasek, 2016). The benefits of such a deliberate practice teaching methodology have been demonstrated in a variety of settings. Collaborative learning has been shown to improve learning outcomes and engagement in educational settings (Deslauriers, Schelew & Wieman, 2011). Additionally, in work settings, collaborative learning with peers has been shown to serve as a mechanism for mutual empowering, mentoring and coaching (Berg et al., 2013).

In mental health settings, Intentional Peer Support (IPS) as a structure to encourage peer support has been shown to provide opportunities for sharing, building relationships and community, skill building, goal setting and mentoring (Ley, Roberts, & Willis, 2010; Jacobson, Trojanowski, & Dewa, 2012). However, practitioners well-versed in grass-roots peer support models such as AA caution the professional mental health community to avoid diminishing the benefits of mutual support and autonomy by formalizing peer support in treatment models, when it can become subject to organizational accountability systems, performance measures, and profit margins (White, 2009). While peer support can be encouraged in professional setting, it ideally arises from within groups of individuals seeking to create their own support networks (Faulkner & Basset, 2012), supporting autonomy and intrinsic motivation.

Regardless of the treatment modality, modifying our behavioral patterns is very challenging (Smalley & Winston, 2010). Researchers have identified four ingredients necessary for behavior change: 1) simple steps; 2) a supportive environment; 3) motivation; and 4) repetition (Smalley & Winston, 2010). A peer support model may support this change process by providing opportunities for individuals to exchange ideas regarding their plans for change, to provide support for one another facilitating motivation for the change, and to report back to one another on continued practice of the new behavior. Encouraging the formation of trusting peer relationships to help create climates of trust and collaboration could increase engagement with goals, strengthen relationships and create meaningful change for recovering addicts. To apply positive psychology to a peer-support model, it is helpful to understand its origins and current application in the mental health field.

## Emergence of Positive Psychology

At the turn of the 21st century, positive psychology as an academic field of inquiry was in

its nascent stages. In 1998, psychologist Martin Seligman dedicated his presidency of the American Psychological Association to a focus on a positive psychology (Seligman, 2002), contrasting his vision with what he described as clinical psychology's emphasis on the negative focus on mental illness and its treatment. In contrast, positive psychology is concerned with those elements that make life worth living (Peterson & Seligman, 2004).

Using empirical research as his guide, Seligman developed a construct of psychological well-being, with the acronym PERMA, that encompasses five pathways to well-being: positive emotion, engagement, relationships, meaning, and achievement (Seligman, 2011). While vulnerable populations such as addicts are not the typical target of positive psychology (Seligman, 2011), psychologists led by Rashid and Seligman (2018) have made significant inroads in the application of positive psychology to psychotherapy. To extend the application of positive psychology to vulnerable populations, it may be helpful to consider a definition of their vulnerabilities to achieving well-being.

**Failure to Thrive Concept**

Viewing addiction through the lens of positive psychology, we might consider the life conditions resulting from addiction and other hardships as a failure to thrive. First introduced in the early twentieth century, the clinical definition of Failure to Thrive has been mostly closely associated with insufficient weight gain in infants (Estrem, Pados, Park, Knafl, & Thoyre, 2017). As an analogy, addicts and other vulnerable populations often lack sufficient coping skills and protective factors to thrive in life. Strengthening positive psychological capacities, such as resilience, posttraumatic growth, meaning-making, and personal narrative in individuals recovering from addiction may help to them lead flourishing lives. To begin a path to recovery, addicts

cease to use substances, and next, the tools of positive psychology can help them to thrive, particularly with the help of supportive peers. The application of positive psychology to psychotherapy, or positive psychotherapy, can inform this effort.

**Positive Psychotherapy**

For fifteen of the past twenty years that positive psychology has evolved as discipline within psychology, practitioners have considered its applications in psychotherapy (Rashid & Seligman, 2018). This new approach has marked a radical departure from traditional psychotherapy, with its mission to define and meliorate individuals' problems, to a focus on what is good and right about life, recognizing and employing individuals' strengths to provide a buffer against mental illness (Rashid & Seligman, 2018). Positive psychologists do not intend to replace traditional modes of psychotherapy, rather to complement and supplement them, allowing individuals to learn skills and experience growth, facilitated by the therapist (Rashid & Seligman, 2018).

Three phases of positive psychotherapy lead to increased well-being: building mastery from the past, examining negative memories, and exploring and pursuing meaning (Rashid & Seligman, 2018). Enhanced well-being resulting from these processes can lead to reduction of symptoms relating to mental illness, better management of negative memories and increased resilience (Rashid & Seligman, 2018). While traditional psychotherapies may share these goals, positive psychology's mechanisms are different; the strategies toward enhanced well-being include remembering positive experiences, reinterpreting negative memories, identifying and using character strengths in a balanced way, and finding meaning and purpose (Rashid & Seligman, 2018). Fostering positive relationships and building intrinsic motivation also offer a path to growth and healing for individuals (Rashid & Seligman, 2018).

We can apply the tenets of positive psychotherapy to a peer support model to support recovery from addiction. Viewed through the lens of positive psychotherapy, peers can support one another to promote healing and growth from the past, to remember positive experiences, and to reexamine negative experiences in new ways. They can support one another to cultivate positive emotion, identify and utilize character strengths, develop positive relationships and find purpose and meaning. Before considering techniques and interventions to utilize in a peer-support model, a more in-depth look at the concepts of positive psychology that underpin these strategies may be helpful.

## Theory and Research on Positive Psychological Principles

How do we help recovering addicts to lead flourishing lives? Theoretical models and empirical evidence on positive psychological principles can provide insight on how we might support the development of cognitive, emotional and behavioral resources that strengthen the capacity for recovery from addiction and enhance well-being for affected individuals. In particular, the following concepts are integral to a positive intervention model:

1. Self-regulation as informed by self-determination, self-efficacy and emotional intelligence
2. Positive emotion
3. Positive affectivity and character strengths
4. Positive relationships
5. Attention and the formation of habits
6. Flow, goal-setting and grit to cultivate engagement
7. Meaning and posttraumtic growth

8. Mattering
9. Optimism and hope
10. Protective factors for resilience
11. Awareness and avoidance of thinking traps
12. Critical thinking
13. Mind-body connection and mindfulness practice
14. Physical activity
15. The Humanities

This review will position us to explore the use of these concepts in an application of positive psychology to support individuals in recovery using a peer-support model.

**Self-regulation as Informed by Self-determination, Self-efficacy and Emotional Intelligence**

Self-regulation can be described as the ability to override or alter automatic responses so as to guide behavior and conform with social or other standards (Baumeister, Gailliot, Dewall & Oaten, 2006). Underdeveloped capacity for self-regulation has been shown to be a major contributing factor to addiction and ongoing barrier to recovery (Crews & Boettiger, 2009; Hester & Garavan, 2004). Poor self-regulation skills have been demonstrated to be both pre-determinants and consequences of drug and alcohol abuse (Crews & Bottenger 2009).

Given its long-term contribution to guiding behavior, self-regulation may be viewed as a stable aspect of personality, however, it may be strengthened through practice in a manner similar to the strengthening of a muscle (Baumeister et al., 2006). Just as a muscle can be exhausted from use, the personal resources available for self-regulation may be subject to depletion, which may lead to less optimal behaviors, such as aggression and substance use (Baumeister et al.,

2006). Self-regulation is not domain-specific, but has an overarching capacity to influence behavior, and the strengthening of self-regulation in one area can result in a strengthened general core capacity (Baumeister et al., 2006). The more effort we apply to self-regulating and to tasks that require self-control, the stronger our buffer against the depletion of resources, suggesting the possible efficacy of psychological interventions to improve self-regulation in recovering addicts.

Fundamentally, self-regulation depends on our sense of control and autonomy in the world, expressed through the distinct, but interrelated components of self-determination, self-efficacy and emotional intelligence. (Baumeister et al., 2006). Like self-regulation overall, these three cognitive capacities are stable in nature, but also malleable over the lifespan by efforts to influence our thoughts, feelings and behaviors (Baumeister et al., 2006; Brown & Ryan, 2015; Maddux 2009; Caruso, Salovey, Brackett, & Mayer 2015).

**Self-determination**. Self-determination can be described as the reasoning that informs our motivations to think and act in specific ways (Brown & Ryan, 2015). Based on the interaction of the self and the environment, motivation can arise from a continuum of extrinsic and intrinsic sources depending on social contexts (Brown & Ryan, 2015). On the extrinsic side of the continuum, individuals view their locus of control over self-regulatory processes as impersonal, a state referred to as amotivation. At the far right of the continuum, individuals are motivated by interest, enjoyment and inherent satisfaction, are intrinsically regulated, and display behavior consistent with autonomy and self-determination (Brown & Ryan, 2015). Thus, having an intrinsic motivation orientation can support the capacity for self-regulation and is desirable in the pursuit of recovery from addiction.

**Self-efficacy**. In addition to possessing intrinsic motivation, a belief in our own capaci-

ties and abilities can support recovery from addiction. Self-efficacy can be described as our belief that we can produce desired effects with our behavior (Maddux, 2009). Self-efficacy informs self-regulation by influencing our goals and resulting behavior, problem-solving and decision-making strategies and perseverance (Maddux, 2009). Beginning in infancy and early childhood and continuing throughout our lifetime, information that we receive from the world shapes beliefs about our agency. Information affecting our agency comes from a variety of sources, including our physiological and emotional states, our experience, vicarious experience, our imaginations and verbal feedback (Maddux, 2009).

Like self-regulation and self-determination, self-efficacy may be malleable in nature, and with effort, we may improve self-efficacy with supportive life conditions and circumstances over the long-term (Maddux, 2009). Psychotherapy and other interventions like peer support may be effective in helping individuals raise self-efficacy, and indeed, low self-efficacy is a common motivating factor for individuals to seek psychotherapy (Maddux, 2009).

**Emotional intelligence.** Emotions not only provide input to inform self-efficacy, but more generally help us evaluate our experience. Emotional intelligence (EI) can be defined as a form of standard intelligence which leverages emotions to optimize cognitive processing and motivate adaptive behavior (Caruso et al., 2015). EI facilitates four processes of perceiving emotion, using emotion to aid rational thought, understanding emotions, and managing emotions to enhance personal growth and social relations. The fourth process, managing emotions, is made possible by the prior three activities (Caruso et al., 2015). While research is needed to demonstrate whether emotional intelligence can be strengthened, positive interventions that assist individuals to perceive and understand emotions and to use emotion to inform thoughts and behaviors could support the development of overall self-regulation.

**Positive Emotion**

As the review of research on self-regulation suggests, regulation of emotion is essential to regulating behavior, and in addicts this function is compromised (Crews & Bottenger 2009). An inquiry into how to help individuals recover from addiction and lead flourishing lives, therefore, should address how to support the strengthening of self-regulation skills. To design interventions that strengthen self-regulation, it is important to first understand the role of emotions in our behavior.

**Regulating emotional states.** The capacity to regulate emotional states and mood is important in cultivating well-being, and the process to move out of unpleasant affective states requires effort in a complex cognitive process of which we are relatively unaware (Carver & Scheier, 1990). Every day, we are faced with external stimuli that elicit positive and negative emotional responses within us, that results in or triggers behavior (Fredrickson, 2012). The intensity of emotion informs how strongly we seek to move toward or away from a stimulus, described as motivational intensity (Harmon-Jones, Harmon-Jones, & Price, 2013).

Negative emotions which are high in motivational intensity may have a narrowing effect on cognitive scope, limiting our consideration of possible responses (Harmon-Jones, Gable & Price, 2013). This narrowing of cognitive scope can be adaptive (Gable & Harmon Jones, 2013; Harmon-Jones et al., 2013; Peterson & Harmon-Jones, 2012). For example, anger, disgust and other negative emotions with high motivational intensity spur us to move away from the stimulus (Harmon-Jones et al., 2013). We are given the energy to protect ourselves, thus serving our survival. In individuals with strong self-regulation, a number of adaptive responses may result from high-intensity negative emotion, such as communicating in an appropriate manner or taking a break from the situation causing the negative emotion.

In individuals with poor self-regulation, the negative emotional and behavioral response to triggers may have undesirable consequences, such as verbal or physical assault of the offending individual, inappropriate abandonment of the current situation, or use of psychoactive substances to escape and soothe the uncomfortable feelings experienced. However, we can learn to influence our emotional state and resulting behavior through our attention and thought process (Fredrickson, 2012). When we respond to an external event with an internal intention, the result can be a behavior change, and practicing this intentional process may provide an opportunity for addicts to strengthen self-regulated behavior.

**Positive emotion as a path to well-being.** While negative emotion with high emotional intensity may narrow cognitive scope, positive emotions may have a broadening effect on cognitive scope and build resources for healthy functioning (Fredrickson, 2012). The ten positive emotions of joy, gratitude, serenity, interest, hope, pride, amusement, inspiration, awe, and love may help us create energy that inspires us toward continued positive states (Fredrickson, 2012). Through the broadening of positive emotions, we build psychological resources in a "broaden and build" cycle central to a theory of positivity (Fredrickson, 2012, p. 31). According to this theory, positive emotion can balance high-intensity negative emotion, helping with self-regulation and supporting adaptive responses to negative triggers. Positive emotion is renewable and can be continually rediscovered, particularly if we are intentional about seeding opportunities to experience them, and the impact can be an upward spiral of positive emotion. Through awareness of times we experience positive emotion and intention to recreate those conditions, we can consciously strive to increase the positive emotion in our lives (Fredrickson, 2012).

A peer support model can help individuals recovering from addiction to cultivate positive emotion and reap the rewards for well-being. Peer partners can discuss their day to day emotional states and help one another identify strategies to move from negative emotion to positive emotion. They can help one another recall positive experiences, and in remembering them re-experience the positive emotion in a savoring process (Fredrickson, 2012). They can also support one another to recreate positive experiences and create new opportunities for positive experiences in their lives going forward (Fredrickson, 2012). Such experiences might include engaging in enjoyable activities, spending time with loved ones, or witnessing an enjoyable event, such as the performing arts or athletics. Peers can then help one another savor the experiences, supporting an upward spiral of positive emotion. With strengthened capacity for knowing how to access and build on positive emotion, recovering addicts have a new resource to help them to remain abstinent in challenging circumstances.

**Positive Affectivity and Character Strengths**

While Fredrickson theorizes on positivity, psychologist Chris Peterson (2006) considers positive affectivity, or the disposition to experience positive emotions, and its impact on life satisfaction. Positive affectivity is independent of negative affectivity; we can have a high propensity for positive affectivity and still experience considerable negative emotions (Peterson, 2006). Just as Fredrickson states that experiencing positive emotions is pleasurable and thus practicing them is self-reinforcing, Peterson and Seligman (2004) propose that each of us possesses signature character strengths that are attuned to our personalities and habits and that we find fulfilling to exercise, supporting positive affectivity.

Through extensive scientific research, Peterson and Seligman (2004) identified twenty-four character strengths that are universal to all humans, and each character strength is expressed

to different degrees in each individual. The character strengths are grouped into six virtues of wisdom and knowledge, courage, humanity, justice, temperance and transcendence, and can be measured in individual by the VIA classification of character strengths, as shown in Table 1.

Table 1
*The 24 Character Strengths and 6 Overarching Virtues*

| Virtue | Character Strengths |
|---|---|
| Wisdom and Knowledge | creativity, curiosity, judgment, love of learning, perspective |
| Courage | bravery, perseverance, honesty, zest |
| Humanity | love, kindness, social intelligence |
| Justice | teamwork, fairness, leadership |
| Temperance | forgiveness, humility, prudence, self-regulation |
| Transcendence | appreciation of beauty and excellence, gratitude, hope, humor, spirituality |

*Note*. Adapted from *Character strengths and virtues: A handbook and classification, by* Peterson, C. K., & Seligman, M. E. P. (2004), Washington, DC: American Psychological Association.

We feel at our best when we are using our top strengths or signature strengths; they are essential, energizing and easy for us to employ in our daily activities and interactions (Neimeic, 2018). We can cultivate well-being by matching our activities to our signature strengths and choosing life circumstances in our work, relationships and recreation that support these strengths (Peterson & Seligman, 2004). While we may at times underuse character strengths or even let them go dormant, as with the positive emotions that make up positivity, we can practice character strengths to strengthen them (Peterson & Seligman, 2004; Neimeic, 2018).

In a peer support model, peer partners can then share their signature strengths with each other and brainstorm ways that they can use them in their relationships, work and recreational activities. Recovering addicts can experiment with using character strengths in different settings to create meaning and engagement and positive energy and emotion, as well as to build self-regulation. As they progress in their own recovery, individuals may also employ their character

strengths to support individuals new to recovery, as with the sponsorship model widely practiced in Alcoholics Anonymous and other 12-step programs.

**Positive Relationships**

The research on positive emotion suggests that positive relationships are an important element to its cultivation. Many individuals addicted to substances lack positive relationships and have weak social support systems, and this deficit can be both a pre-determining factor and a consequence of substance use (Khantzian, 2013; Nutt et al., 2010). To build positive relationships and social support for individuals recovering from substance addiction, it is helpful to understand the relationship between positive emotion and positive relationships and how social support is formed.

When individuals provide mutual care and concern and help one another build on positive emotion, they can create a connection characterized by positivity resonance, when biological and behavioral states synchronize and synergize (Fredrickson, 2012). We may be biologically hardwired to need positive emotion that comes from relationships as an evolutionary strategy to support our survival and flourishing (Haidt, 2006; Peterson, 2006). Individuals and groups with strong social bonds may indeed win out in the process of natural selection (Haidt, Seder & Kesebir, 2008).

There are many benefits to close relationships with others. Positive emotions can serve as a currency to form social bonds, spreading among individuals and groups in a viral manner similar to health conditions and behaviors (Fowler & Christakis, 2008). Positive processes inherent to close relationships, such as the expression of gratitude and love, can provide a buffer to negative external stimuli (Gable & Gosnell, 2011). Close relationships can have a counteracting

effect on stress, positively affecting decision-making and cultivating meaning, engagement and a sense of accomplishment in the individual (Gable & Gosnell, 2011).

Positive relationships and their associated positive emotions can be intentionally cultivated. Researchers have coined the term high quality connection (HQC) to describe social interactions that result in significant positive emotions (Berg et al., 2013; Heaphy & Dutton, 2008). One strategy for building high quality connections is the process of capitalization, or the sharing of positive experiences between individuals (Gable & Gosnell, 2011). When an individual recounts a positive event, the listener may build on the positive emotion experienced by the narrating individual by reacting enthusiastically, asking questions and sharing the joy regarding the importance and meaning of the event, in a style termed active-constructive responding (Gable & Gosnell, 2011). In peer support model, recovering addicts can be guided to practice capitalization and active-constructive responding to experience high quality connections, build positive emotion and strengthen positive relationships, further delineated in the application plan section.

Recovering addicts can cultivate positive emotion not only in dyad relationships, but also in larger groups. Haidt and colleagues (2008) describe the potential for a hive-like experience when in a large group, eliciting the feeling that our individual selves are a part of one organism. There is joy and ecstasy associated with synchronized movement and shared sensual pleasure in sights, sounds and tastes, like those shared in rituals and celebrations across human history (Haidt et al., 2008). Hive-like experiences can support the cultivation of positive emotion and positive relationships for recovering addicts and are an element of the positive interventions delineated in the application section.

**Attention and the Formation of Habits**

Based on the research, the cultivation of positive emotion, use of character strengths and formation of positive relationships can help addicts to strengthen self-regulation and enhance well-being. These efforts require attention and focus, which are foundational in shaping behavior and forming habits (Fredrickson, 2012; James, 1892/1984; Melchert, 2002). In the late 19th century, psychologists theorized that habits are based in the physiological construct of pathways in the brain (James, 1892/1984). Small, daily decisions to practice good behaviors strengthen cognitive pathways and our readiness to engage in such behaviors. These practiced actions become habits, automating our decision-making and freeing attention for the complex work of our lives (James, 1892/1984).

Breaking old habits and forming new habits may be achieved when new behavior becomes automatic under circumstances that once triggered old behaviors (James 1892/1984). We may not always be able to control external stimuli affecting our emotional state, however, we have the power to influence them through our actions (James 1892/1984). When we focus on our course of action, we are present-minded, weighing our options and employing what Aristotle referred to as our practical wisdom to make the virtuous choice (Melchert, 2002).

One of the main goals of recovery from addiction is to extinguish habitual use and dependence on substances, replacing these unhealthy behaviors with healthier ones (Bohlman, 2018). Educating recovering addicts on strategies to leverage their attention to support the formation of habits can be part of an intervention strategy to support their recovery. In a peer support model, peer partners can talk with one another about the focus of their attention, particularly in the context of triggers for the use of substances. As peers become more aware of their attention in these situations, they can help one another generate alternative responses to the triggering

influences and practice healthier choices regarding their behaviors, strengthening habits that support well-being.

**Flow, Goal-setting and Grit to Cultivate Engagement**

In addition to helping us to break old habits and form new habits, mastery of our attention, what we bring into consciousness, and the discipline of ordering relevant information, is linked with greater happiness and well-being (Csikszentmihalyi, 1990). The positive emotions associated with flow, or deep engagement in an activity (Csikszentmihalyi, 1990), and their influence on grit, or persistence toward goals (Duckworth, Peterson, Matthews, & Kelly, 2007), can provide necessary energy to achieve and maintain goals (Locke, 1996) for abstinence and personal growth for recovering addicts.

**Flow.** When we are in an active, engaged state, executing a task, solving a problem, or engaging in the creative process, we experience an effortless deep concentration, referred to as a state of flow (Csikszentmihalyi, 1990). In flow state, the information we allow into awareness is congruent with our goals and psychic energy flows freely (Csikszentmihalyi, 1990). This alignment of our thoughts, intentions, feelings and senses on the activity at hand is pleasurable, heightening subjective well-being and making it more likely for the future. Our sense of self is positively influenced, with greater confidence in our skill and capability (Csikszentmihalyi, 1990). In order to cultivate flow, it is helpful to have purpose and clear goals to engage in activities with deep concentration.

**Goal-setting.** Goal-setting positively influences duration, intensity and direction of action, and ultimately performance (Locke, 1996), supporting the cultivation of flow state. While the formation of goals is an activity that resides in the mind, progress toward and attainment of

goals requires feedback from and action in the body, forming a circular and interdependent relationship between mind and body in our response to the environment (Locke, 1996). When we reframe negative input from the body and external environment, we learn and readjust strategies to support goal-directed behavior (Locke, 1996).

To support recovery from addiction, it helpful for individuals to develop strategies to interrupt automatic emotional and cognitive processes that trigger addictive behavior. The formation and pursuit of new responses and strategies to old triggers requires attention to emotions and the physiological sensations in the body they produce (Shusterman, 2006). This process can help recovering addicts to set smaller goals in support of larger goals, in a feedback loop between body and mind. As goals become more specific and difficult, greater commitment is required, but higher performance results (Locke, 1996). In this way, recovering addicts can strengthen their capacity to abstain from substances and engage in behaviors and activities that support their recovery and well-being.

**Grit.** While clearly articulated goals and awareness of our physiological state can help support goal-directed behavior, persistence toward challenging goals over time is difficult to maintain. We need stamina to run the long race necessary for accomplishing difficult goals, referred to as grit (Duckworth et al., 2007). Achievement of difficult goals requires not only effort, intellect and talent, but sustaining focus on goals over time (Duckworth et al., 2007).

Sustaining focus on goals associated with grit can be supported by the cultivation of flow state in goal-directed activity. Clearly articulated goals motivate us to engage in goal-directed behavior and support the conditions necessary for flow. The state of free-flowing psychic energy associated with flow can create passion for activities that support our goals (Csikszentmihalyi, 1990), strengthening our persistence and grit (Duckworth et al., 2007), in a circular relationship.

We have the power, then, to create the conditions to induce a state of flow by focusing attention and aligning or adjusting goals as we learn new information (Csikszentmihalyi, 1990). The resulting sense of autonomy, self-determination and competence (Ryan, Huta, & Deci, 2008) then supports grit and ultimately self-regulation, by giving the individual a sense of their own power. This intrinsic motivation elicits engagement (Ryan et al., 2008).

Individuals are likely to most likely to feel intrinsically motivated in pursuit of personal health, growth, affiliation, deep relationships, community contribution and generativity (Ryan et al., 2008). We should thus seek to help recovering individuals to clearly articulate goals related to their personal well-being, guiding them to identify activities which support these goals. Peers can offer supportive listening to their partners as they articulate goals and identify activities toward their attainment. Peers can be sounding boards as individuals encounter challenges to their goals and generate problem-solving strategies. Finally, peers can help individuals to savor their experiences of flow state, capitalizing on the associated sense of well-being and creating more passion and energy to strengthen grit. The resulting goal-directed behaviors will support engagement and self-regulation in recovering addicts by helping them to keep their long-term interests for recovery in mind and creating a path to well-being through flow.

**Meaning and Posttraumatic Growth**

**Meaning.** Like engagement and related concepts such as flow, goal-setting and grit, having a sense of meaning in life is an essential element of well-being (Seligman, 2011). When we experience meaning, we believe that our life has value and makes sense to us, and we have a sense of purpose (Martela & Steger, 2016; Baurmeister & Vohs, 2002). We can bear the "how"" of life when we know the *"*why," Victor Frankl (1963, p. 76) quoted 19th century philosopher Friedrich Wilhelm Nietzsche as saying. Having a strong sense of who we are, our competencies

and strengths and the direction we would like our lives to take can foster resilience and well-being.

Viewed through the lens of somaesthetics, the body and the environment interact to produce meaning, understanding, efficacy and beauty in our lives (Shusterman, 2006). For addicts, chronic use of psychoactive substances can compromise the body's capacity to accurately perceive input from the environment (Crews & Boettiger, 2009; Hester & Garavan, 2004; Nutt et al., 2010), derailing the process of understanding and meaning-making. As a result of self-destructive behavior and compromised physical and mental health inherent to addiction (Nutt et al., 2010), addicts often experience deep suffering. In their emotional suffering, they may lose a sense of coherence about their lives and life's inherent value, and subsequently, a sense of meaning.

For addicts, rediscovering meaning after a crisis of coherence and value in their lives can support the recovery process. The identification of character strengths and strategies for cultivating positive emotion, positive relationships and engagement described above can help bring meaning, coherence and value to their lives. In addition, it may be important for individuals to look back on past painful experience to cultivate meaning and personal growth, in a process referred to as posttraumatic growth (Tedeschi & Calhoun, 1996).

**Posttraumatic growth**. Common in the history of addicts are a wide array of traumatic experiences including childhood abuse and neglect, violence and the impact of substance abuse by others (National Institute on Drug Abuse, 2018). Posttraumatic growth (PTG) offers the opportunity for positive psychological change during and after trauma, crisis, and highly stressful life circumstances (Tedeschi & Calhoun, 2004), and can be helpful to addicts in the recovery process. PTG is facilitated by the process of converting negative ruminations to a focus on

meaning-making, problem-solving, reminiscence and positive anticipation (Tedeschi & Calhoun, 2004).

As a result of posttraumatic growth, individuals' psychological functioning survival surpasses levels of development that existed prior to the crisis (Tedeschi & Calhoun, 2004). When posttraumatic growth occurs, individuals place value on a stressful event, despite the trauma remaining distressing and undesirable (Tedeschi & Calhoun, 2004). PTG can heighten appreciation of life and increase meaning in relationships, perception of personal strength, recognition of new possibilities, and spiritual development (Tedeschi & Calhoun, 1996). The combination of identifying painful emotions, understanding their causes and then choosing new cognitive and behavioral responses to trauma can help revise a person's life narrative, facilitating posttraumatic growth (Tedeschi & Calhoun, 2004) and support lasting recovery from addiction.

Social support can play a strong role in posttraumatic growth because it allows for disclosure of past painful experience and can support positive ruminations, especially if the support is stable and consistent over time (Tedeschi & Calhoun, 2004). Storytelling in a group setting can reinforce the new beginning-oriented thinking that characterizes posttraumatic growth, with peers listening to and encouraging each other (Tedeschi & Calhoun, 2004). The relatedness and connection created through mutual sharing is long-established as a benefit in traditional therapeutic models such as Alcoholics Anonymous (Walker, 2018).

Peer partners can be instrumental in helping recovering addicts to experience posttraumatic growth. The listening partner can be instructed to watch out for moments where the crisis of lack of cohesion and value in the narrator's story turns to insight and understanding, asking questions and offering supportive comments to strengthen this growth. Well-being is further created for the narrator when he/she is understood by his/her peer partner. The resulting positive

emotion and high-quality connection can strengthen well-being for both peer partners and serve as a catalyst for growth, achievement of goals, and self-regulation.

**Mattering**

Closely related to the concepts of meaning-making and social support is that of mattering, or feeling valued and adding value, to ourselves and others (Prilleltensky, 2016). The psychological constructs of care and compassion; collaboration and respect for diversity; (Prilleltensky, 2016); belonging (Walton & Cohen, 2011), hope (Snyder, 2002), connection (Dutton & Heaphy, 2003) and resilience (Reivich & Shatté, 2002) inform our sense of mattering and can be beneficial to individuals recovering from addiction as they strive to develop a positive self-concept and positive relationships. Fundamental to showing others empathy and care and lessening social isolation is the practice of nonjudgmental listening (Prilleltensky, 2016). A peer support model can offer recovering addicts an environment for offering and receiving emotional support, empathy and care through nonjudgmental listening, supporting a sense of mattering, posttraumatic growth and meaning.

**Optimism and Hope**

As the literature on meaning reviewed above suggests, the way we make meaning of problems contributes to our well-being and helps us to believe that life is worth living even in the face of problems (Peterson & Steen, 2009). To possess such a disposition is to be optimistic, offering us hope and confidence about the future. Optimism and positive prospection, or the mental representation of positive possible futures, can promote current well-being, impact future well-being and protect against depression (Roepke & Seligman, 2016). Optimism has been linked to a number of positive benefits, including positive mood, perseverance, achievement, positive relationships, good health and freedom from trauma (Peterson & Steen, 2009).

Schneider (2001) argues that optimism, in principle, does not yield an unrealistic assessment of current reality and potentiality. Rather, it allows us to consider the positive in our present and the potential for positive outcomes in our future, and in doing so, has the potential to shift our reality in a positive direction (Schneider, 2001). An important contributing factor to optimism is explanatory style, or the way we tend to explain the causes of events that occur to us (Peterson & Steen, 2009). When we repeatedly experience negative events and perceive that we have no control over them, we may develop a maladaptive explanatory style termed learned helplessness (Peterson, Maier, & Seligman, 1993). When we experience learned helplessness, we generalize the sense of helplessness over past negative events to new situations in our lives, resulting in thoughts, feelings and behaviors that do not help us to cope and thrive (Peterson et al., 1993).

Many addicts have experienced multiple negative events in the past (National Institute on Drug Abuse, 2018), making them vulnerable to feelings of helplessness and lack of control. Interventions to promote optimistic explanatory style and positive prospection may support recovering addicts to overcome a sense of helplessness in their lives and hopelessness about the future. Evaluating beliefs can lead to insight that undesirable outcomes may be the result of pessimistic interpretations of bad events (Reivich, Gillham, Chaplin, & Seligman, 20113). A peer support model can provide a forum for recovering addicts to identify thoughts and feelings and to imagine more positive beliefs. Generating alternative responses to challenging situations can then help them to shift their explanatory style in the future.

**Hope.** Just as an optimistic explanatory style can help us to see the positive in our present and imagine positive possible futures, the cultivation of hope enhances the likelihood of goal attainment by helping us to gather mental energy to support agency and behavior along the

path to goals (Magyar-Moe & Lopez, 2015). Hope can be viewed as an active ingredient originating in the mind and motivating the body to action toward positive change. Applying hope theory to psychotherapy, a therapeutic alliance is formed when a client believes that working with the therapist will bring about positive change (Magyar-Moe & Lopez, 2015). The psychotherapist then helps the client to define strategies for goal attainment, to create motivation and mental energy toward their pursuit, to reframe challenges that arise, and to create reminders to engage in the strategies that support success (Magyar-Moe & Lopez, 2015).

The same process used in a psychotherapeutic relationship to build hope may be applied to a peer support model. Peer partners can help one another to develop strategies toward goal attainment, to find motivation to pursue goals and to persist in the face of challenges through a trusting relationship, which could greatly support recovery from addiction.

**Protective Factors for Resilience**

Hope theory emphasizes the importance of persisting to overcome challenges in the pursuit of goals (Magyar-Moe & Lopez, 2015), which is an individual attribute known as resilience (Reivich & Shatté, 2002). In common with the literature on optimism (Peterson & Steen, 2009) and positive emotion (Fredrickson, 2012), resilience theory draws on the idea that our thoughts, or the interpretation of events, rather than the events themselves trigger our emotions and behaviors, and impact situational outcomes (Reivich & Shatté, 2002).

To support resilience, individuals possess a number of protective factors that help to prevent and repair potential psychological damage from negative life events (Masten & Garmezy, 1985; Snyder & Lopez, 2009). Protective factors are made up of biological components, such as traits or dispositions we are born with or may develop over time, as well as environmental components, such as places or groups like family and institutions (Reivich & Shatté, 2002). They

work together in our lives over time to help us succeed and experience positive outcomes in the face of challenges.

The benefits of protective factors on resilience can be strengthened through effort to identify and have greater awareness of their presence in our lives (Reivich & Shatté, 2002). Personal reflection and sharing with another person is instrumental to this process (Reivich & Shatté, 2002), and for recovering addicts, sharing with a peer partner may be helpful to promote the use of protective factors.

**Awareness and Avoidance of Thinking Traps**

Just as recognizing the protective factors in our lives can strengthen resilience, becoming aware of and overcoming cognitive weaknesses can support resilience. In his research on and treatment of depression in the 1960s, cognitive psychologist Aaron Beck (2005) identified a number of thinking traps, or maladaptive thoughts and beliefs that lead to suboptimal behavior and outcomes, that make people vulnerable to depression. Thinking traps are based in an inaccurate perception of sensory input and include jumping to conclusions, tunnel vision, magnifying and minimizing, personalizing, externalizing, overgeneralizing, mindreading and emotional reasoning (Reivich & Shatté, 2002). While thinking traps erode resilience, we have the power to overcome them by becoming aware of thought patterns in the midst of challenging situations; we can learn to shift maladaptive thoughts and beliefs and change behavior to promote better situational outcomes (Reivich & Shatté, 2002).

A peer support model can provide a forum for individuals recovering from addiction to examine their own thinking traps and to change thoughts, beliefs and behaviors to strengthen resilience. In order to engage in the process of evaluating their thinking traps, recovering addicts

must cultivate the ability to think critically about their internal state and external environment, providing the necessary mental state for problem-solving and behavioral change.

**Critical Thinking**

Critical thinking has been described as a character strength essential for successful human functioning, which allows us to sift through and organize the content of incoming stimuli (Golinkoff & Hirsch-Patek, 2016). With the attentional focus enabled by strong critical thinking skills, we are able to hold relevant facts in our minds, enabling us to generate solutions (Golinkoff & Hirsch-Patek, 2016).

Despite its importance for human functioning, critical thinking is compromised in individuals experiencing trauma and toxic stress (Tough, 2018). In addition to negatively impacting executive function, past traumatic and stressful experiences are correlated with physical and mental illness, including anxiety, depression, self-destructive behaviors and alcoholism. Given the high incidence of past trauma and hardship in the lives of addicts (National Institute on Drug Abuse, 2018; Khantzian, 2013) and the research suggesting compromised critical thinking functions in those who have experienced trauma (Tough, 2018), it is important to consider strategies that could help rebuild and strengthen critical thinking in recovering addicts. Mindfulness practice is one such strategy.

**Mind-body Connection and Mindfulness Practice**

Mindfulness can be considered to be a mental seat belt, giving us protection from our automatic responses to environmental stimuli and creating space for considering our thoughts and feelings and resulting behaviors in the moment (Shusterman, 2006; Smalley & Winston, 2010). This greater capacity to attend to the current state of body and mind can then strengthen problem-solving and critical thinking capacities (Golinkoff & Hirsch-Patek, 2016), improve attention,

working memory and intelligence (Hurley, 2014), and encourage creative thinking (Smalley & Winston, 2010), all of which can be compromised in addicted individuals (Crews & Boettiger, 2009; Hester & Garavan, 2004).

A mindfulness practice can help individuals reappraise thoughts and emotions and gain insight into emotions (Dahl, Lutz, & Davidson, 2015), strengthening emotional regulation and overall self-regulation (Hölzel et al., 2011; Neff, 2003). Awareness of thoughts, feelings and physical sensations can shift self-perception and improve flexibility in behavioral responses (Dahl et al., 2015). The positive impact of mindfulness on self-regulation has been measured by self-reports and neural imaging, showing changes in multiple locations in the brain responsible for processing thoughts and emotions (Hölzel et al., 2011).

Strengthened self-regulation can act as a buffer to psychopathology and addiction (Dahl et. al, 2015). Mindfulness practice has been shown to reduce psychiatric and stress-related symptoms by strengthening the immune system, producing physical changes in our brain activity, and potentially altering genetic expression (Hölzel et al., 2011; Smalley & Winston, 2010). For individuals with a genetic predisposition to addiction and compromised cognitive function, the promise of the benefits of mindfulness practice can provide hope and optimism for the future. An attentional meditation practice can also help evolve personal narrative, facilitating posttraumatic growth by allowing individuals to be aware of painful thoughts and feelings and to have self-compassion (Neff, 2003).

The numerous benefits of a mindfulness practice, including increasing critical thinking and problem-solving skills, cultivating creativity, strengthening self-regulation, facilitating posttraumatic growth and improving physical and psychological health suggest that it can be an ef-

fective intervention for individuals recovering from addiction. In a peer support model, individuals recovering from addiction can support one another in their mindfulness practice by exchanging ideas about meditation strategies and awareness of body, mind and impact of the environment. They can encourage each other and help motivate one another through supportive listening and generating strategies to overcome barriers to practicing mindfulness.

**Physical Activity**

Like a mindfulness practice, physical activity can be a positive intervention to support psychological growth and well-being. By intervening at the physical level of the body, exercise stimulates the mind-body feedback loop that can facilitate goal-directed behavior and well-being (Faulkner, Hefferon & Mutrie, 2015). Given the body's influence on thoughts, feelings and behavior, physical activity may protect against and treat depression and anxiety and promote positive attributes such as competence, autonomy and social relatedness (Faulkner et al., 2015). There is early evidence to support the positive effect of exercise on posttraumatic growth and related attributes such as competence, autonomy and social relatedness (Faulkner et al., 2015). To support recovery, individuals recovering from addiction would benefit from strengthening mind-body relationship with interventions for physical exercise. Peer partners can support one another to establish habits, reflect on challenges and benefits, and encourage one another to continue to develop a physical exercise routine.

**The Humanities**

Just as mindfulness and physical activity can promote well-being, engagement with philosophy, history, literary studies and the arts can also support flourishing by positively impacting sensory and emotional states, social and cognitive processes, and our sense of our identity (Hallum & MacDonald, 2008; Tay, Pawelski & Keith, 2018). In the pursuit of well-being, we are all

motivated to feel good, to repair negative aspects of ourselves and to better understand ourselves (Dalebroux et al., 2008; de Botton & Armstrong, 2013). Engagement in the humanities can offer motivation to become our best selves and seek virtue, wisdom, human connection and transformation (Moores, 2015). Included in this endeavor are the pursuit strength, agency, intimacy, friendship, sociability, growth, and on its path lie opportunities for peak experiences, ecstasies, self-awareness and love (Moores, 2015).

Both the creation and appreciation of art can be effective strategies to regulate our emotions. Creating and enjoying art helps us find a seed of positive emotion and grow it, as prescribed in positivity theory (Fredrickson, 2012), provides a buffer against negative emotion, and helps counteract the depletion we experience from effortful self-regulation (de Botton & Armstrong, 2013). Appreciation and creation of art can not only be instrumental in regulating mood, but also help to rebalance extremes in our character. Art can compensate for our frailties and help us to return to a healthier psychological mean, drawing us toward wholeness (de Botton & Armstrong, 2013).

To fully appreciate art or to create it, we must bring our full attention to it. While we may be inclined to abandon a learning process due to the psychological effort required, engaging in the arts may help us to follow a lesson through its course and learn something new and important about ourselves (de Botton & Armstrong, 2013). Art presents rich subject matter and psychological atmosphere to capture our attention and draw us into the creative process or reflective process to describe our experience. At the end of the process, we feel a sense of satisfaction that we have aptly created or described the work of art, and we may use the meaning we have found in the art to tell others about ourselves, thus also feeling understood (de Botton & Armstrong, 2013).

Given its power in self-expression, the experience of emotion and the building of relational connection, engagement in the humanities can be applied to the therapeutic process of recovery from addiction and cultivation of well-being. A peer support model can provide a forum for individuals to plan opportunities to create and appreciate art, to reflect on its benefits, and to strategize on ways to improve benefits in the future.

**Application Plan: Positive Interventions using peer-support**

A peer support model can serve as a framework for implementing positive interventions for individuals recovering from addiction. Before detailing the proposed interventions, it is helpful to define positive interventions and how they are rendered effective, including examining the concepts of psychological safety and safetyism that can support them. Interventions to help individuals recovering from addiction to heal from the past, thrive in the present and create a flourishing future can then be explored. In particular, this peer support model will employ interventions for the practice of:

1. Healing from the past
    a. Meaning and posttraumatic growth
    b. Character strengths
2. Thriving in the present
    a. Active Constructive Responding (ACR)
    b. Hive activities
    c. Flow and engagement
    d. Problem-based and collaborative learning
    e. Mind-body connection and mindfulness practice
    f. Avoiding thinking traps

   g. Cultivating protective factors for resilience
   h. Physical exercise
   i. The humanities – music, visual art, literature
3. Creating a flourishing future
   a. Goals and grit
   b. Cultivating optimism and hope

**Definition of Positive Interventions**

Positive interventions are tools to promote well-being and flourishing. While research on the validity and reliability of positive interventions is in its early stages, there is foundational research supporting their efficacy (Pawelski, 2009). A number of positive psychological interventions have been shown to be effective in increasing well-being and in some cases, reducing depressive symptoms (Pawelski, 2009; Scheuller, 2014; Sin & Lyubomirsky, 2009). Given these findings, positive interventions could accelerate the recovery process for addicted individuals with specific strategies, acting as a walking stick, compass and roadmap on the path to well-being.

Positive interventions may be viewed as consisting of five elements: 1) an activity; 2) an active ingredient; 3) a target system; 4) a targeted change; and 5) a desired outcome (Pawelski, 2009). For example, one positive intervention that has been empirically validated is the three blessings exercise (Seligman, 2011), where asking questions (active ingredient) about our attention (target system) is aimed at shifting our focus toward good things (target change) in order to increase positive emotions (desired outcome) (Pawelski, 2009). Positive interventions may be

customized to address different facets of well-being delineated in the PERMA construct as positive emotion, engagement, relationships, meaning and accomplishment (Seligman, 2011; Pawelski, 2009).

**Strategies for Designing Effective Positive Interventions**

To maximize and prolong benefits of positive interventions, researchers have begun to explore strategies such as counteracting hedonic adaptation (Bao & Lyubomirsky, 2014), considering person-activity fit (Scheuller, 2014), assigning multiple interventions over a longer period of time, and encouraging practice of activities beyond the intervention period (Sin & Lyubomirsky, 2009). These strategies can be helpful when designing positive interventions to support individuals recovering from addiction.

**Counteracting hedonic adaptation**. Hedonic adaptation is the tendency of individuals to regress to a baseline of subjective well-being, or to no longer derive the same level of positive emotion from a given experience (Bao & Lyubomirsky, 2014). Variety of experience may help to counteract hedonic adaptation by continually refreshing our attention and awareness on new experiences and prolonging positive emotion. Similarly, encouraging appreciation of experience, or savoring, can counteract hedonic adaptation by focusing attention on positive emotions associated with the intervention, including opportunities to share the experience with others or to revisit the experience in new ways (Bao & Lyubomirsky, 2014). In a peer support model, we can counteract hedonic adaptation by offering flexibility and variety in the way that individuals engage in intervention activities and encouraging peer partners to savor positive experiences and emotions associated with interventions with one another.

**Person-activity fit to support intrinsic motivation.** Just as variety and flexibility can counteract hedonic adaptation, they can also support person-activity fit, or the degree to which an

activity aligns with individual characteristics and preferences, in positive interventions. Despite universally shared needs for autonomy, competence and relatedness, people vary in personality characteristics, and cultures vary in regard to values and social norms (Schueller, 2014). Focusing interventions on individuals' strengths (Schueller, 2014) and aligning them with individuals' cultural values (Sin & Lyubomirsky, 2009) may help them perform the related activities more willingly and for longer periods of time, potentially leading to longer lasting impact on well-being (Schueller, 2014). Similarly, finding interventions that an individual finds enjoyable and satisfying can build intrinsic motivation to sustain the activities over time, bolstering their effectiveness (Bao & Lyubomirsky, 2014; Scheuller 2014). As we design positive interventions in a peer support model, allowing individuals to adapt the interventions to align with their personal and cultural identities can better motivate them to engage in them for longer periods of time, ultimately positively impacting their well-being.

**Psychological safety to support development of self-regulation.** As individuals recovering from addiction engage in positive interventions, it is important that they do so in an environment characterized by safety and security, where they receive positive feedback and are not afraid of punishment for exploration (Brown & Ryan, 2015). Such an environment can allow individuals to express vulnerabilities and create high quality connections, to take risks (Spreitzer, Sutcliffe, Dutton, & Grant, 2005) and to develop autonomy and a sense of self-determination important for self-regulation (Brown & Ryan, 2015). Creating safe psychological environments for positive interventions can support recovering addicts to work on skills and behaviors that support their well-being and thriving. A peer support model could be effective in creating this safe psychological space as trust and understanding is fostered between peers.

**Balancing safe psychological space with avoiding safetyism.** While psychological safety is an important element to consider when designing positive interventions, this safety should be balanced with freedom and permission to take healthy risks and to fail. Freedom to explore the world, to get hurt, and to learn from painful experiences can make us stronger (Bloom, 2017). While protection from harm is understandably desirable for all humans, there is value in engaging in challenging tasks and stretching ourselves with effort to promote growth and achievement of goals, and even negative emotions have utility in providing contrast to positive emotion (Bloom, 2017).

A cultural trend toward overprotection from harm spurred psychologist Paul Bloom to coin the term safetyism (Bloom, 2017), and this trend may adversely impact the treatment of addicted individuals, if not balanced with the values of challenge and healthy risk in recovery. A current best-practice in psychotherapy is that of trauma-informed care, directing us to focus on clients' traumatic life events to understand their presenting problems, including crises of addiction (Substance Abuse and Mental Health Services Administration, n. d.). While it is important to validate and respect client's painful experiences, focusing solely on negative experience may contribute to a personal narrative that inhibits growth and empowerment (Tedeschi & Calhoun, 2004). To balance respect for a painful past, we should encourage personal growth by promoting individuals' strengths, agency and self-efficacy and counteracting messages that they are not equipped to cope with their present and future or to experience well-being because of a painful past.

Taken together, counteracting hedonic adaptation, allowing for person-activity, fit and providing a safe psychological environment while avoiding safetyism provide guidelines as we strive to develop interventions that respect autonomy and self-determination, encourage intrinsic

motivation and posttraumatic growth, and increase chances for prolonged engagement in intervention activities. Ultimately, these strategies can increase efficacy of interventions and maximize the positive impact on the recovery and well-being of individuals recovering from addiction, and as such, inform this peer support model.

**Flourishing Partners: A Peer Support Model to Promote Well-being for Recovering Addicts**

A peer support model called *Flourishing Partners* will support individuals in recovery to heal from the past, thrive in the present, and create a flourishing future. The model can be applied to diverse settings, including addictions treatment facilities and grassroots environments such as AA. Mental health professionals and participants in self-formed groups alike are considered capable of implementing the model, and to encompass this, the individual organizing the peer support model is referred to here as the *Flourishing Leader*. Credentials of the Flourishing Leader might be professional or simply based on personal experience with addiction and a desire to continue personal growth and facilitate growth in others. Incorporated into existing therapeutic structures, the Flourishing Partners model offers a cost-effective way for grass-roots and institutional settings to introduce positive interventions as a path to well-being.

In the broadest sense, the Flourishing Partner model provides psychologically safe spaces for open discussion to facilitate personal growth (Spreitzer et al., 2005). Weekly 90-minute group sessions provide a learning environment for the Flourishing Leader to introduce positive psychological concepts and positive interventions, drawing off the literature review and intervention summaries provided here. Flourishing partner pairs will then meet outside of weekly group sessions for at least 45 minutes to practice interventions presented in group sessions. The dialogue and mutual help and support will create opportunity for high quality connections that

deepen relationships and strengthen intrinsic motivation to continue with the learning (Berg et al., 2013; Ryan et al., 2008; Soloman, 2004).

To begin implementation of the model, the Flourishing Leader will instruct participants in a group support setting, such as an AA group or inpatient or outpatient group therapy, to choose a Flourishing Partner, described as someone with whom they can share about the past, practice positive interventions in the present, and dream about the future. The Flourishing Leader may assign partners, however, allowing choice of partners can support participants' intrinsic motivation (Ryan et al., 2008; Ley et al., 2010). If an individual should experience any challenges with securing a partner for peer support, the Flourishing Leader can assist them to find a match.

Flourishing Partners will have the freedom to switch partners throughout the intervention period, further supporting intrinsic motivation. As Flourishing Partners develop deeper relationships with a growing number of their peers, an organic network of emotional ties and caring commitments may evolve (Faulkner & Basset, 2012; Jacobson, Tronjanowski & Dewa, 2012; Soloman, 2004). It is hoped that this social support network can become a protective factor (Masten & Garmezy, 1985) and resource for participants not only during the intervention period, but into the future.

The interventions associated with the Flourishing Partner model are organized into three phases: healing from the past, thriving in the present and creating a flourishing future. While it may be helpful to follow this sequence, Flourishing Leaders may choose to customize the approach to meet the needs and desires of the participants, allowing for best person-activity fit (Schueller, 2014). The ultimate objective of the Flourishing Partner model is support individuals recovering from addiction to experience the positive emotions, positive relationships, meaning,

engagement and sense of accomplishment associated with the PERMA model and a flourishing life (Seligman, 2011).

**Healing from the past.** The first step in the Flourishing Partner model is to begin to heal from the traumas and negative experiences that may have both precipitated and resulted from addictive behavior. The healing process will employ the positive psychological concepts of meaning-making, posttraumatic growth, personal narrative, and character strengths in two interventions: the creation of a meaning story and the identification and use of character strengths. Using the peer support model, it will also be a first opportunity to develop positive relationships and positive emotion through high quality connections (Dutton & Heaphy, 2003).

***Meaning story intervention***. Inherent to the meaning-making process is the movement of belief and understanding about experience from negative to positive; it helps to remedy the bad and help the good and is essential to happiness, fulfillment and generativity (Baurmeister & Vohs, 2002). Bringing negative thoughts and feelings to consciousness releases them from the individual, and sharing them with others either individually or collectively allows them to be acknowledged and honored, incorporating them into the meaning of our experience and positioning us for further growth (Tedeschi & Calhoun, 2004). The use of storytelling and narrative, both written and oral, can facilitate the process of meaning-making by providing structure for thoughts and feelings and developing insights and coping strategies (Baurmeister & Vohs, 2002).

The first four weeks of the Flourishing Partners model will focus on storytelling and personal narrative activities, with participants writing one story each week, as outlined in Appendix A. For individuals who are not comfortable with writing as a medium, alternative mediums such as video blogs or live monologue practiced in advance could facilitate better person-activity fit.

To introduce the intervention, the Flourishing Leader will provide an overview on meaning-making and posttraumatic growth in the group setting. It will be important to validate for participants that past negative experiences can remain distressing and undesirable, even as we begin to see their value and find meaning in them, allowing us to function at a higher level than we may have prior to the event, which is the essence of posttraumatic growth (Tedeschi & Calhoun, 2004).

After the overview on meaning-making and posttraumatic growth, over the following week participants will be instructed to write a meaning story, or to use alternative mediums such as video blog or live monologue. Participants may meet with their Flourishing Partner as often as helpful between sessions, but for at least 45 minutes to share their meaning stories and their experiences creating it. Flourishing Partners will be instructed to look for moments in their partners' stories that lack coherence and cohesion that may indicate a need for further reflection and meaning-making (Martela & Stegner, 2016; Baurmeister & Vohs, 2002). When further insight is gained, Flourishing Partners will be instructed to share in the satisfaction of the new discovery and to savor the high-quality connection it may have created (Dutton & Heaphy, 2003).

In the following group session, participants will have the opportunity to share their meaning stories with the group in a similar fashion that they did with their healing partners. The Flourishing Leader will create a safe psychological space for this deeply personal process by encouraging participants to be respectful and supportive listeners, asking thoughtful questions and praising the new meaning and evolving personal narrative of the participants who share. The meaning story intervention may be repeated in subsequent group sessions as many times as is viewed as helpful and desirable to the participants, but a four-week process is recommended here

as a guideline. It is hoped that a month-long engagement in the meaning story activity will produce significant progress in meaning-making, posttraumatic growth and evolving personal narrative for the participants.

***Character strengths intervention***. The identification of personal character strengths will be the second stage of the process of healing from the past. For many individuals who have experienced addiction, a poor self-image characterized by guilt and shame for their addictive behavior can overshadow a sense of personal strength and self-worth. This negative self-image has often been reinforced by others who have been hurt by their addictive behavior (Nutt et al., 2010). The free online VIA Strength Survey (VIA Character Strengths Survey, 2019) can help individuals recovering from addiction to see themselves in a new light and to learn how to employ their character strengths in their lives. As they consider their strengths, they may also recognize ways that challenging experiences helped to build on their strengths, further supporting posttraumatic growth.

For the character strength intervention (see Appendix B), the Flourishing Leader will instruct participants to take the VIA Strength Survey and to bring their strengths profile to the next group session. The Flourishing Leader will provide an overview of character strengths, including the idea that we all possess the 24 character strengths in unique combinations that make up our personal strength profile (Peterson & Seligman, 2004). The 24 strengths organized by the six virtues will be presented, and participants will learn that using signature strengths feels easy, energizing and essential in their lives (Niemiec, 2018).

The concept of strength-spotting in ourselves and others will be introduced as a strategy to help participants to build strengths, as will the concept of blind spots leading to overuse and

underuse of strengths to help participants develop a balanced approach to their strengths (Peterson & Seligman, 2004; Niemiec, 2018). The practice of strength-spotting helps bring strengths into awareness so that we can unleash their power and avoid missed opportunities to employ them due to blind spots. The more we look for them, the better access we have to them in the future (Niemiec, 2018). Participants will also be asked to keep in mind the golden mean of character strengths, which is the balanced use of strengths appropriate for a given situation or context, protecting against their overuse or underuse (Niemiec, 2018).

As a homework assignment at the end of the session, the Flourishing Leader will ask participants to consider their strengths and how they currently use them and may use them in the future in the various facets of their lives, including family and close relationships, work, their physical, mental and spiritual health, and financial life. A collection of questions and prompts (see Appendix B) will be shared with participants to guide their discussion with Flourishing Partners, and participants will be asked to bring their top three insights from the exercise to the following group session. A guided discussion of the learning about character strengths will further reinforce awareness of strengths and opportunities to employ them in their lives to support their recovery and flourishing.

**Thriving in the Present**

To support recovery from addiction and help individuals to thrive in the present, the Flourishing Partner model provides nine interventions integrating a number of positive psychology concepts. First, practice with Active Constructive Responding (ACR) will help individuals to develop positive relationships, create positive emotion and strengthen support networks through high-quality connection (Gable et al., 2006). Second, the opportunity to participate in a

hive-like experience will further build positive emotion and positive relationships. A third intervention focused on cultivating flow will support engagement with healthy and goal-related activities. Fourth, participants will be given an opportunity to practice problem-based and collaborative learning to further support engagement and develop critical thinking and creativity. The fifth intervention will help participants to strengthen mind-body connection and practice mindfulness meditation to support self-regulation. For the sixth intervention, participants will practice with avoiding thinking traps that weaken resilience, followed by a seventh intervention to identify and strengthen protective factors to build resilience. The final two interventions will encourage participants to integrate physical exercise and the humanities into their lives to promote four facets of the PERMA model: positive emotion, meaning, engagement and accomplishment. With these new tools and perspectives to support their recovery from addiction, participants will be positioned to thrive in their present.

**Active Constructive Responding (ACR).** When we ruminate about positive events, we create an opportunity to build on the positive emotions associated with them (Fredrickson, 2012). Our social interactions offer opportunities to *capitalize* on, or experience continued positive emotion and perceived meaning from, positive events in our lives by sharing about them with others (Gable & Reis, 2010). As listeners, we can make the most of others' capitalization by being deliberate in the way that we respond to them. In an Active Constructive Response (ACR) style, the listener provides authentic support by asking for detail about the story and savoring the positive aspects of the story with the listener (Gable, Gonzaga, & Strachman, 2006). ACR offers what might be considered a cycle to support well-being: experience something positive, share it, further experience the positive emotion in the interaction, strengthen the relationship, experience more positive emotion, and so on. The result of ACR can be a high-quality connection (Dutton

& Heaphy, 2003) that builds trust and intimacy and creates an upward spiral of positive emotion (Frederickson, 2012).

In order to help participants to build positive emotion, positive relationships and supportive networks, the Flourishing Leader will provide an overview of and ask participants to practice with ACR in the group session (see Appendix C). Participants will be asked to recall a positive event and describe it to the Flourishing Partner, who will be instructed to ask for detail and reflect on aspects of the story that allow that narrator to savor the event. The Partners will then reverse roles as narrator and listener and report back to the group on their experience with ACR.

For homework relating to ACR, the Flourishing Leader will instruct participants to practice with ACR in their daily interactions, looking for opportunities when others mention a positive event and helping them to capitalize on it. They will discuss their progress in their weekly meeting with their Flourishing Partner, and the full group will reflect on their experiences with practicing ACR in the following session. When participants practice with ACR, it is hoped that they will learn a pathway to high-quality connections, which are correlated with recovery from pain and suffering (Berg et al., 2013; Heaphy & Dutton, 2008). ACR and the high-quality connection it facilitates that can be ever-present tools to help participants thrive.

**Hive activities**. Hive-like group experiences can also support high quality connections and sense of belonging to build positive relationships, well-being and posttraumatic growth (Berg et al., 2013; Haidt et al., 2008; Heaphy & Dutton, 2008). Hive behavior can be fostered by synchronous group activities, which provide an opportunity for periodic loss of self in the company of the collective (Haidt et al., 2008). These opportunities are personally satisfying and characterized by intense joy, as individuals forget petty concerns and feel a part of something

larger than themselves. They are suffused with energy and purpose (Haidt et al., 2008). Emphasizing similarity rather than diversity, encouraging pleasurable group activities and creating healthy competition among small groups all support a hive-like environment.

To help individuals recovering from addiction to experience the benefits of hive experience, the Flourishing Leader will provide an overview of hive behavior in a group session, and may choose to incorporate music or dance, the preparation and sharing of a meal, or a game into the session (see Appendix D). Following the group session, the group may elect to attend an art or sporting event that cultivates a loss of self, immersion in community and joy (Haidt et al., 2008). To promote person-activity fit and the autonomy associated with choice, the Flourishing Leader may survey the group to choose an outing or community event to attend. The timing of the outing is flexible, and could be scheduled for the beginning, middle or end of the total program, depending on the needs and wishes of the participants.

In addition to participating in a hive activity together, Flourishing Partners will be asked to look for ways that they benefit from hive experiences in their current routines, and to plan new ways to do so, such as attending a festival or concert. Flourishing Partners may opt to experiment with hive activities together or separately, but will meet to discuss their experience with hive activity prior to the following group session. At the session, the Flourishing Leader will facilitate a discussion of the benefits of hive activity and help participants to brainstorm on ways to overcome any challenges experienced in the process.

**Flow and engagement**. Mastery of our attention, what we bring into consciousness, and the discipline of ordering relevant information can support flow state, or feeling of effortless engagement with a task (Csikszentmihalyi, 1990). The alignment of our thoughts, intentions, feelings and senses on the activity is pleasurable, heightening subjective well-being and making it

more likely for the future (Csikszentmihalyi, 1990). By bringing all of our attention to a desired goal and its related action, we have control to reframe activities so that they require less effort and bring more pleasure, almost as if playing a game.

For an intervention to cultivate flow (see Appendix E), the Flourishing Leader will provide an overview of flow state and encourage participants to be aware of opportunities for and practice with flow in their daily lives. For example, participants might choose simple tasks like cleaning up their living space to engage in flow by envisioning the desired outcome and creating steps to achieve it, then challenging themselves to accomplish the task in a playful and engaged way. Or participants might think about activities when they naturally experience a flow state, such as when studying a new topic, listening to music, creating art or working on a puzzle. The Flourishing Leader can encourage participants to set aside time between sessions for such flow activities and to share their experience with their Flourishing Partner. At the following session, participants will share about their efforts to cultivate flow state and the benefits they experienced as a result. It is hoped that this intervention will foster the cultivation of flow for participants going forward, directly and positively impacting their day to day well-being.

**Problem-based and collaborative learning**. Critical thinking has been defined as the ability to make rational decisions based on asking the right questions (Golinkoff & Hirsh-Pasek, 2016). Functions related to critical thinking, such as working memory, self-regulation and executive function have been correlated with achievement, health and well-being (Goldin et al., 2014; Hurley, 2017; Jaeggi, Buschkuehl, Jonides, & Perrig, 2008). With similar features to critical thinking, creativity can be defined as the ability to create novel connections between ideas to produce meaningful outcomes (Kienitz et al., 2014) and has been identified as a critical capacity for success in school, work and navigating the modern world (Ding, Tang, Tang, & Posner 2014;

Golinkoff & Hirsh-Pasek, 2016; West, Hoff, & Carlsson, 2016). Like critical thinking, creativity may be a fluid construct that can be enhanced (Golinkoff & Hirsh-Pasek, 2016; Kienitz et al., 2014) through engaging in interactive learning activities (Kienitz et al., 2014).

As science journalist Dan Hurley (2014) reminds us, our minds and our futures should never be defined by yesterday; we are capable of developing our minds through targeted strategies. The strategies of problem-based learning (PBL) and collaborative learning have been shown to foster critical thinking skills and self-regulation (Tiwari, Lai, So, & Yuen, 2006; Golinkoff & Hirsh-Pasek, 2016), and such activities may support individuals to recover from addiction and thrive. Problem-based learning uses a problem statement as the focus for exploring a new topic in learning settings that fosters critical thinking skills, and is often structured as a collaborative group process (Boud & Filetti, 2013). In collaborative learning activities, individuals work together deliberately, requiring sensitivity to the thoughts and feelings of others, a component of self-regulation (Golinkoff & Hirsh-Pasek, 2016).

For the session on problem-based and collaborative learning (see Appendix F), the Flourishing Leader will provide activities for participants to engage in problem-based, collaborative learning to support critical thinking and creativity (Kienitz et al., 2014). After providing an overview of the topic, the Flourishing Leader will ask Flourishing Partner pairs to work together to craft solutions to social problems such as crime reduction or creating community spirit in cities. Flourishing Partners may team up with another pair to make a group of four participants, should they so choose. The teams will spend the session conducting internet research on the social problem, brainstorming on solutions and summarizing their strategy for addressing the problem. Participants will present their ideas to the group at the end of the session. The Flourishing

Leader will encourage participants to ask questions and to build on the strategies presented by the teams.

Following the session, teams may write up their strategies in a brief to send to their elected officials, supporting their sense of mattering (Prilleltensky, 2016). Flourishing Partners will discuss the learning experience, its challenges, and its benefits. The Flourishing Leader will encourage participants to continue to look for opportunities for problem-based and collaborative learning in their lives. It is hoped that the intervention will foster critical thinking and creativity, self-regulation, and self-efficacy, all helpful in supporting recovery from addiction and promoting flourishing for participants.

**Mind-body connection and mindfulness practice.** Our feelings inform our thoughts and expectations about the future and influence our behavior (Fredrickson, 2012). While feelings arise as physical sensations in our bodies, we have power over the course they take in our minds, and we can send messages back to our body that direct not only our actions, but also our subsequent feelings (Fredrickson, 2012). We can choose to acknowledge our feelings, to increase or decrease their intensity and to shift ourselves into a different emotional state (Carver and Scheier, 1990; Dalebroux et al., 2008). As we strengthen our understanding of these interrelating mechanisms, we will have more control of our emotions contributing to overall self-regulation, be able to repair negative emotional states, and be more capable of enjoying the experience of emotion (Fredrickson, 2012).

For the mindfulness practice intervention (see Appendix G), the Flourishing Leader will provide an overview of the benefits of a mindfulness practice on the mind-body connection and self-regulation and demonstrate a mindfulness meditation exercise. While there are many op-

tions for guided meditation available, Flourishing Leaders may choose a nine-minute audio recording called *Focused Attention Meditation with Rich Fernandez* found on www.mindful.org (Fernandez, 2018). The participants will then be asked to practice this mindfulness meditation daily between sessions. Flourishing Partners can provide support to one another as they attempt to establish this new behavior and share the benefits and challenges they encounter with the process. At the following session, participants will share their experience with mindfulness meditation with the full group, and the Flourishing Leader will facilitate a discussion to identify common themes and helpful strategies.

It is hoped that the proposed mindfulness intervention will support individuals in recovery to focus on their psychological and emotional states to improve their coping skills. By helping them to be non-judgmental, open and accepting of their current emotional state, participants are poised to solve problems more creatively, with greater flexibility and planning capacity. In addition, they may have more control to repair negative mood and build positive emotion.

**Awareness and Avoidance of Thinking Traps.** Resilience is considered to be an individual's ability to adapt positively despite adversity or trauma (Reivich & Shatté, 2002). As our brains seek shortcuts and efficiencies to regular cognitive processes, we may develop maladaptive thinking traps, or inaccurate perception of our circumstances (A. T. Beck, 2005). These thinking traps weaken our resilience by negatively impacting our ability to adapt and cope effectively with challenges (Reivich & Shatté, 2002). We are strongly influenced by our beliefs about the cause of adversity, and inaccurate beliefs, or thinking traps, can negatively impact our behavior and resulting situational outcomes.

For the intervention to help individuals avoid thinking traps (see Appendix H), the Flourishing Leader will provide an overview of the traps, including jumping to conclusions, tunnel vision, magnifying and minimizing, personalizing, overgeneralizing, mindreading and emotional reasoning. The Leader will then facilitate a group discussion, asking individuals to brainstorm examples and instances when they fell into thinking traps and alternative strategies to support resilience. If it is helpful, participants may think about characters and events in movies or books to illustrate thinking traps and enrich discussion.

As homework, participants will be asked to consider how they succumb to thinking traps in their daily lives and to experiment with new ways to interpret their circumstances to produce better outcomes. For their discussion with their Flourishing Partner, they will be asked to bring an example of an adverse event when they fell into one or more thinking traps. This process could make participants feel emotionally vulnerable, as they reveal weaknesses to their Partners, and the Flourishing Leader should remind the participants to respond with sensitive support. At the following group session, the full group will discuss their experience, with the hope that the increased awareness of thinking traps and new strategies to avoid them will strengthen resilience.

**Protective factors for resilience.** Protective factors are characteristics in an individual or group that predict positive outcomes in the face of challenges, including traits or dispositions we are born with or may develop over time, as well as environmental factors, such as family or institutions (Masten & Garmezy, 1985). Ideally, we have multiple protective factors that work together in our lives over time to help us succeed. The greatest threat to our resilience are challenging circumstances that erode our protective factors over time (Masten & Garmezy, 1985). It is desirable to prevent damage, repair damage and strengthen protective factors in our efforts to build resilience.

In the protective factor intervention (see Appendix I), the Flourishing Leader will provide an overview and encourage participants to identify their own protective factors, examining what is healthy and strong about themselves and what resources support them in their environment. A series of question prompts will guide their discussion (see Appendix I). As homework, Flourishing Partners will continue their exploration of protective factors in their lives and to think of examples in their daily experience when protective factors support their resilience. A discussion will follow at the next group session, and it is hoped that the awareness and knowledge of protective factors will continue to inform participants sense of strength and self-efficacy as they recover from addiction and strive to thrive.

**Physical exercise**. Physical activity is an important component of health and well-being, with many benefits to psychological health needed to support recovery from addiction and flourishing. Studies on physical exercise have demonstrated its role in promoting the mind-body connection, reducing symptoms of anxiety and depression, and facilitating psychological growth. (Faulkner et al., 2015). Regular exercise can strengthen positive attributes such as competence, autonomy and social relatedness, thus supporting posttraumatic growth and goal-directed behavior (Faulkner et al., 2015).

In the physical exercise intervention (see Appendix J), the Flourishing Leader will provide an overview on the benefits of physical exercise and help participants to brainstorm ways to incorporate physical activity into their daily lives. The Flourishing Leader might consider bringing participants on an outing to engage in physical activity, such as visiting a state park or recreation area to hike, bike or canoe. This activity has the added benefit of hive activity to build positive emotion and relationships (Haidt et al., 2008) and spending time in nature, which has been

shown to contribute to health and well-being (Ratey & Manning, 2014). Alternatively, an outside instructor might be invited to the session to teach a fitness or yoga session. To build enthusiasm and confidence relating to a physical exercise habit in participants, the Flourishing Partner should consider the starting fitness levels of participants, make the group activity accessible for all, and possibly recommend (or require) that participants receive a physician's clearance for exercise prior to the session.

Between sessions, participants will experiment with incorporating physical exercise into their daily routines. They will be encouraged to share with their Flourishing Partners about successes and challenges relating to establishing habits and continuing with their exercise routine, exchanging ideas for how to enjoy exercising and to savor the sense of pride and accomplishment in meeting their exercise goals. The Flourishing Leader will facilitate a similar discussion during the following group session and may choose to revisit the topic and intervention at later points in the Flourishing Partner program.

**The humanities.** There is a considerable body of research demonstrating the benefits of the humanities for well-being. For example, researchers have demonstrated that music can positively affect emotion, mood, physical state, behavior, communication, relationships and our personal identities (MacDonald, Kreutz, & Mitchell, 2012; Västfjäll, Juslin and Hartig, 2012). Music has been shown to reduce stress by distracting us, shifting our mood and facilitating a state of flow or effortless engagement with an activity (MacDonald et al., 2012; Västfjäll et al., 2012; Csziksentmihilayi, 1996). In the area of literature, fiction reading has been shown to help us become more compassionate and better able to take someone else's point of view (Dodell-Feder & Tamir, 2018). Further benefits of the humanities include findings that creating art with content associated with positive emotion can be a successful strategy in repairing negative mood and

bringing a more positive storyline and meaning in the interpretation of negative events (Dalebroux et al., 2008).

Given the myriad of benefits on well-being associated with the humanities, the Flourishing Partners model incorporates an intervention to encourage participants to explore their own engagement with them (see Appendix K). The structure for this intervention recognizes that the humanities' positive effects are contingent upon individual preference and meaning to the individual (MacDonald et al., 2012). As such, participants will have the freedom to engage in the area of the arts and humanities to which they are most responsive and derive the most personal meaning and cultural fit, with varied and immersive experiences (Tay et al., 2018).

To help incorporate the humanities into participants' daily lives, the Flourishing Leader will provide an overview of the benefits of the humanities on well-being and encourage participants to explore their engagement with music, art and literature (see Appendix K). During the session, the Flourishing Leader may wish to play recorded music, show a film, bring a piece of art to share or read poetry or passages from a book. The Leader may then facilitate discussion by the participants on the effects of the chosen piece, setting an example for the related homework assignment.

Between group sessions, participants will be asked to revisit art forms that they have enjoyed in the past and to consider engaging in new mediums. This experimentation may take the form of listening to music, reading literature, looking at visual art in both private and public settings. For example, participants might spend time listening to favorite songs or new music suggested by their Flourishing Partners, their family members or friends. They might visit an art museum, attend a musical performance, go to a book reading, or attend a concert or live performance. Similarly, they might create their own art by playing an instrument or singing, drawing

or painting, or writing a poem or short story. Flourishing Partners will meet to discuss the effects of the engagement with the humanities on their senses, psychological state and perceived well-being, and the full group of participants will do so at the following group session.

Given the broad array of ways that participants can engage with the humanities, the Flourishing Leader may choose to devote multiple sessions to this intervention, focusing on a particular art form, specifying whether participants should appreciate art or create their own art for each session. At a minimum, one session devoted to the humanities is recommended to introduce participants to its many benefits for their recovery and thriving.

**Creating a Flourishing Future**

The creation of a meaning story and identification of character strengths are interventions that can support individuals recovering from addiction to heal from past painful experience. Then, to support thriving in the present, we can offer interventions to build positive relationships, engagement, positive emotion, deeper meaning and a sense of accomplishment, including interventions to learn ACR, offer opportunities to participate in hive-like experiences, avoid thinking traps, cultivate protective factors, establish a physical exercise routine and engage in the humanities. To promote a flourishing future, we can support individuals recovering from addiction to develop goals and grit toward goals, as well as an optimistic mindset and hope.

**Goals and grit.** Given the high relapse rates of addicts (McLellan et al., 2000), we can deduce that abstinence and recovery from addiction are challenging goals, requiring the full intention of the individual. The extent to which recovery is pursued autonomously may strongly influence individuals' persistence to maintain abstinence and achieve well-being outcomes. When motivation is intrinsic, individuals pursue activities because of their inherent interest and enjoyability, rather extrinsic regulation or control (Ryan et al., 2008). Similarly, when activities

associated with goals are personally meaningful, the goals become self-concordant, aligning with their personal identities and values (Sheldon & Houser-Marko, 2001; Ryan et al., 2008). Individuals feel most intrinsically motivated for pursuits involving their personal health and growth, affiliation, relationships, community contribution and generativity (Ryan et al., 2008). We can support addicts to believe in the importance of their recovery for the purpose of their health, relationships and personal growth, building the necessary grit to persist when recovery becomes particularly challenging.

To help strengthen participants' belief in the importance of their recovery and maintain focus on recovery as a goal (see Appendix L), the Flourishing Leader will provide an overview on goal-setting and grit and provide a visioning exercise to help them imagine a drug- and alcohol-free future. The Flourishing Leader will encourage them to think about the ways recovery will positively impact their health and relationships, and make it possible for them to pursue interests in their lives. During the group session, the Flourishing Leader will ask participants to develop this vision with the support of their Flourishing Partner and to share about their vision in the following session. Participants will be asked to provide detail as to how they will enjoy their newfound health, new and repaired personal relationships, and achieve their goals for personal development and growth. It is hoped that the intervention will build intrinsic motivation, autonomy and self-efficacy needed for the grit and persistence during the challenging moments of recovery.

**Cultivating optimism and hope.** Optimism provides us hope and confidence about the future (Peterson & Steen, 2009). In order to have optimism, we must make meaning of our current circumstances in such a way that supports a positive outcome for the future. A positive interpretation of our current environment and causes of events, or optimistic explanatory style, is

associated with positive mood, good morale, perseverance and problem-solving, achievement, popularity, good health and long life, and posttraumatic growth (Peterson & Steen, 2009).

In order to support participants to develop an optimistic explanatory style (Appendix M), the Flourishing Leader will provide an overview on the topic and then offer question prompts for participants to ask their Flourishing Partner to explore their own explanatory style during a group session. Flourishing Partners can listen for opportunities to help their partner shift their explanatory style from negative to positive, helping them imagine a positive outcome to a challenging situation. The Flourishing Leader will instruct participants to continue their conversation with the Partners between sessions, and the group will discuss their collective experience with shifting explanatory style to one of optimism in the following meeting. With greater awareness of their explanatory style and their own negative patterns, participants can become more optimistic, positively impacting the outcomes of a multitude of small events that then comprise their future. With strengthened goals and grit and more optimism and hope, individuals recovering from addiction are poised for a flourishing future.

Appendices A – M summarize the positive interventions used in the peer support model using a framework of five elements of the positive intervention process: 1) an activity; 2) an active ingredient; 3) a target system; 4) a targeted change; and 5) a desired outcome. The interventions and peer support are intended to serve as levers for promoting well-being for recovering addicts (Pawelski, 2009).

**Additional resources for positive interventions**. Rashid and Seligman's (2018) *Positive Psychotherapy: Clinician Manual* offers a rich foundation and comprehensive guide to cutting-edge practice and research of positive psychotherapy. The book details the processes involved in positive interventions and mechanisms of change and provides fifteen sample sessions

for clinicians. Flourishing Leaders are encouraged to reference this seminal work for state-of-the-science positive interventions, which may supplement those proposed in the Flourishing Partner model. In cases where the Flourishing Partner interventions are not impactful, the interventions proposed by Rashid and Seligman (2018) may provide effective alternatives. Several of these interventions may be of particular benefit in a peer support format and are summarized in Appendix N.

## Considerations of Relapse and Resistance to Change

To support the success of the Flourishing Partners model, it will be important for Flourishing Leaders to maintain awareness of high relapse rates for recovering addicts, to understand the intractable nature of addiction and challenges to behavioral change, and to be familiar with best-practice strategies to prevent relapse and overcome resistance to change. Two resources are suggested below as further reading for Flourishing Leaders to deepen knowledge and understanding about the therapeutic change process and relapse prevention.

In her a comprehensive guide to cognitive therapy, Judith Beck (1995), daughter of psychologist Aaron Beck, identifies key relapse prevention strategies for therapists, including attributing progress to the patient, helping the patient to generalize problem-solving strategies beyond current circumstances, preparing the patient for setbacks, and helping the patient to prepare for termination by tapering sessions. In addition, offering several sessions after termination of therapy, which Beck refers to as booster sessions, may provide an added level of comfort and support for patients as they work independently to implement strategies learned in therapy into their lives (J. S. Beck, 1995).

Practitioners of the proposed Flourishing Partners model can incorporate Judith Beck's (1995) strategies into group sessions. For example, Flourishing Leaders can help participants set

realistic expectations about progress, normalizing the occurrence of setbacks and challenges that they may face in adopting the new thinking and behaviors associated with positive interventions. They can help participants take ownership for the progress they are making, building a sense of autonomy, self-determination and self-efficacy. Considering Judith Beck's (1995) recommendation for preparing patients for termination, one of the benefits of the Flourishing Partners model is the potential for partners to maintain their supportive relationship beyond the program period. Flourishing Partners have the option of remaining friends and supportive partners indefinitely, potentially reducing anxiety about termination associated with patients in therapy.

In their seminal book on relapse prevention (RP) for addicts, Marlatt and Donovan (2005) consider not only particular risks for different populations of addicts, but also prevention of relapse by type of substance. Based on a cognitive-behavioral framework, Marlatt and Donovan's (2005) book can be an instructive guide for Flourishing Leaders, who seek to support participants as they practice new thinking and behaviors that can reduce the risk of relapse and promote flourishing. In particular, Marlatt and Donovan's (2005) model can help Flourishing Leaders to support participants who have a relapse during the program period. For example, Flourishing Leaders can help participants to reframe the relapse from causes that are internal, global and uncontrollable to considering the relapse to be part of a learning process and an opportunity to consider alternative coping strategies in the future (Marlatt & Donovan, 2005). Participants can be guided to consider opportunities to reduce daily stressors and increase pleasurable activities to bolster recovery and prevent relapse, supported by the positive interventions presented in the Flourishing Partners model. In addition, mindfulness meditation has also been demonstrated to support successful recovery from addictive behavior (Marlatt & Donovan, 2005) and is integrated into the Flourishing Partners model.

Most importantly, as practitioners of the Flourishing Partners model, we must remember the multi-faceted and unpredictable nature of substance abuse and respect the significant chance for relapse during and after the program for participants (Marlatt & Donovan, 2005). Key determinants in the complex dynamic of relapse and recovery from addiction are self-efficacy, outcome expectancy, motivation, coping, emotional states, craving and social support (Marlatt & Donovan, 2005). While the Flourishing Partners model is aimed primarily at increasing well-being for recovering individuals, the positive interventions identified here coincidentally address many of these determinants of relapse by seeking to build personal resources such as resilience, optimism, positive emotions, positive relationships, meaning and engagement. It is hoped that the Flourishing Partner model can be an effective supplemental model to traditional therapeutic approaches to addictions treatment to not only reduce the risk of relapse, but to promote flourishing.

## Measurement

The proposed Flourishing Partner model will benefit from evaluation to demonstrate its efficacy in supporting recovering addicts to lead flourishing lives. Resources for evaluation are often limited, particularly in grass-root settings, and the recommendations for measurement here are intended to require a reasonable amount of time and effort to implement. Evaluation consists of administration of the PERMA profiler (Butler & Kern, 2016) before and after the program, and qualitative feedback through a *Voice of the Flourishing Partners* format, with a tracking system to summarize basic elements of the program (Parsons, Gokey, & Thornton (2013).

Before the start of the Flourishing Partner program, Flourishing Leaders may administer the PERMA-profiler, a brief multidimensional measure of flourishing (Butler & Kern, 2016), and they may administer it again at the end of the program to measure changes in well-being. To

support a sense of mattering, participants will be given an opportunity to evaluate the Flourishing Partner program through one-on-one time with the Flourishing Leader or through written feedback or video blogs to the Flourishing leader in a feature called the Voice of the Flourishing Partners. Communication should be kept confidential and/or anonymous, as desired by participants. A sample format for providing feedback is included in Appendix O. To summarize the impact of the interventions, practitioners may use a system offered by Parsons, Gokey and Thornton (2013) to monitor inputs, activities, output, outcomes, and impact, also provided in Appendix O.

## Conclusion

With millions of Americans suffering from the pain of addiction, and relapse rates hovering at 50% for those who try to overcome it, there is ample room for a new approach to supplement current addiction treatment models. The Flourishing Partners model provides tools for individuals recovering from addiction to develop the positive relationships, positive emotion, meaning, engagement and accomplishment associated with Seligman's PERMA model (Seligman, 2011). It is hoped that the model can offer addicted individuals not only hope, but a pathway for healing from the past, thriving in the present, and flourishing in the future. To maximize individual benefit, practitioners of the Flourishing Partners model are encouraged to consider the unique characteristics of their group and its members, and to adjust interventions as appropriate. It is requested that Flourishing Leaders implement the evaluation strategies mentioned here and to share data to help determine the efficacy and value of the model for addictions treatment and the field of positive psychology.

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# Appendix A

## Meaning Story Intervention

Activity – creation of a meaning story as a written narrative, video blog or live monologue

Active ingredient – sharing of meaning story with Flourishing Partners, who honor and acknowledge the experience for the narrator

Target system – thoughts and feelings about past painful experience

Target change – movement of belief and understanding about experience from negative to positive; development of new insights and coping strategies

Desired outcome(s) – greater well-being achieved through (1) healing from trauma and negative experiences; (2) posttraumatic growth and evolved personal narrative to perceive the positive elements of one's past; (3) development of positive relationships and positive emotion through high quality connections

Intervention process

- Flourishing Leader to provide an overview on meaning-making and posttraumatic growth in the group setting.
- Flourishing Leader to validate that past negative experiences can remain distressing and undesirable, even as we begin to see their value and find meaning in them, allowing us to function at a higher level than we may have prior to the event, which is the essence of posttraumatic growth (Tedeschi & Calhoun, 2004).
- Flourishing Leader to encourage Flourishing Partners to be respectful and supportive listeners, asking thoughtful questions and praising the new meaning found by their partners
- Group participants to create a meaning story through written narrative, video blog or live monologue between sessions

- Flourishing Partners to meet to exchange meaning stories before next session
- Flourishing Partners to look for moments in their partners' meaning stories that lack coherence and cohesion that may indicate a need for further reflection and meaning-making (Martela & Stegner, 2016); Baurmeister & Vohs, 2002).
- Flourishing Partners share in the satisfaction of the new insights and to savor the high-quality connection it may have created (Dutton & Heaphy, 2003)
- Participants may choose to share their meaning stories in the following group session
- The meaning story intervention may be repeated in subsequent group sessions as many times as is viewed as helpful and desirable to the participants, but a four-week process is recommended here as a guideline.

Helpful resources:

- Baurmeister & Vohs, 2002;
- Martela & Stegner, 2016
- Tedeschi & Calhoun, 2004
- Dutton & Heaphy, 2003

# Appendix B

## Character Strength Intervention

Activity – identification of character strengths through the VIA survey; exploration of current and possible uses of character strengths

Active ingredient – considering character strengths and strength-spotting with Flourishing Partners

Target system – self-image, self-knowledge

Target change – improved self-image and awareness of personal strengths and self-worth (Nutt, 2010); self-knowledge about activities participant finds easy, energizing and essential (Niemiec, 2018)

Desired outcome(s) – greater well-being achieved through positive emotion, engagement and meaning inherent to understanding and employing character strengths

Intervention process

- Flourishing Leader to instruct participants to take the free online VIA Strength Survey and to bring their strengths profile to the following group session.
- Flourishing Leader to provide an overview of character strengths (Peterson & Seligman, 2004; Niemiec, 2018).
- Flourishing Leader to instruct Flourishing Partners to explore current and possible uses of character strengths together; with Partners strength-spotting for one another
- Flourishing Partners to bring their top three insights from the exercise to the following group session for a discussion led by Flourishing Leader

Prompts for Flourishing Partner discussion on character strengths (R. Niemiec, personal communication, February 8, 2019)

- 5 minutes for 5 strengths – in your own words, tell me about each of your top five signature strengths for one minute each. Questions to consider:
  - What strength(s) did you know best? Least?
  - Where were the points of challenge for you?
  - What does this indicate about your strengths self-knowledge? Your blind spots?
- Questions for strength-building:
  - How do your strengths present across different domains in your life – work, personal?
  - Where do you feel most comfortable using your strength?
  - In what situation does your strength get you in trouble?
  - What interferes with your strength?
- Types of Strengths - talents, skills, resources, interests:
  - What are you good at?
  - What are your know-hows?
  - What are your supports?
  - What are your passions? Hobbies? Leisure activities?
  - Through the lens of your strengths: who are you?
- Make an action plan for strengths-based practice
  - Choose a method: journaling, self-monitoring, reflecting, discussing, experimenting
  - Set a plan

Helpful resources:

- Niemiec, 2018
- Peterson & Seligman, 2004

# Appendix C

## Active Constructive Responding (ACR) Intervention

Activity – sharing about and ruminating on positive events

Active ingredient – Active Constructive Responding (Gable et al., 2006) with Flourishing Partner

Target system – memory and emotion

Target change – building on positive emotion associated with events (Fredrickson, 2012)

Desired outcome(s) – greater well-being achieved through positive emotion and savoring of positive events (Fredrickson, 2012); positive relationships strengthened through high quality connections (Dutton & Heaphy, 2003)

Intervention process

- Flourishing Leader to provide an overview on the positive impact of emotion through rumination on positive events, capitalization, and active-constructive responding
- Flourishing Leader to instruct one Flourishing Partner to recall positive events, with the other partner providing active-constructive responses; partners will then reverse roles
- Participants to practice with ACR in their daily interactions, looking for opportunities when others mention a positive event and helping them to capitalize on it.
- Flourishing Partners to discuss their experience with ACR in their weekly meeting
- Flourishing Leader to facilitate group reflection on their experiences with practicing ACR in the following session.

Helpful resources

- Berg et al., 2013
- Dutton & Heaphy, 2003

- Fredrickson, 2012
- Gable et al., 2006
- Gable & Reis, 2010

# Appendix D

## Hive Activity Intervention

Activity – experience of an event characterized by synchronous group activity, such as live music or dance, the preparation and sharing of a meal, a game or sporting event

Active ingredient – loss of self in the company of the collective

Target system – emotion and relationships

Target change – experience of joy, feeling part of something larger than themselves, creation of positive memories

Desired outcome(s) – greater well-being achieved through positive emotion and positive relationships as a result of sharing the hive experience

Intervention process

- Flourishing Leader to provide an overview hive behavior and positive impact on emotion and relationships
- Flourishing Leader may choose to incorporate music or dance, the preparation and sharing of a meal, or a game into the session
- Between sessions, Flourishing Partners will look for ways that they benefit from hive experiences in their current routines, and to plan new ways to do so, such as attending a festival or concert.
- Flourishing Partners may opt to experiment with hive activities together or separately, and will meet to discuss their experience with hive activity prior to the following group session.
- At the following session, the Flourishing Leader will facilitate a discussion of the benefits of hive activity and help participants to brainstorm on ways to overcome any challenges experienced in the process.

- Group participants may elect to attend together an art or sporting event that provides a hive experience at some point in the Flourishing Partners program

Helpful resources:

- Berg et al., 2013
- Haidt, Seder & Kesebir, 2008
- Heaphy & Dutton, 2008

# Appendix E

## Flow and Engagement Intervention

Activity – engagement in an activity requiring focus of attention, such as studying a new topic, practicing a new skill, working on a puzzle or creating art

Active ingredient – flow state created by deep concentration

Target system – attention and emotion

Target change – mastery of attention, sense of effortlessness and pleasure associated with flow state (Csikszentmihalyi, 1990)

Desired outcome(s) – greater well-being achieved through alignment of thoughts, intentions, feelings and senses in flow state (Csikszentmihalyi, 1990); support of goal-directed behavior and goal attainment (Locke, 1996; Duckworth et al., 2007)

Intervention process

- Flourishing Leader to provide an overview of flow state and encourage participants to be aware of opportunities for and practice with flow in their daily lives
- Between sessions, participants to set aside time for such flow activities
- Flourishing Partners to meet and share their experience with flow activities
- At the following session, Flourishing Leader to guide participants to reflect on their efforts to cultivate flow state and the benefits they experienced as a result

Helpful resources:

- Csikszentmihalyi, 1990
- Duckworth et al., 2007
- Locke, 1996

## Appendix F: Problem-based and Collaborative Learning Intervention

Activity – engagement in a problem-based and collaborative learning activity, such as designing a solution to a social problem

Active ingredient – working with others to foster creative solutions to problems

Target system – critical thinking and executive function, self-regulation

Target change – ongoing strengthened critical thinking and greater creativity by individual participants across life domains

Desired outcome(s) – greater well-being achieved through (1) improved life performance resulting from strengthened critical thinking, creativity, self-regulation and self-efficacy (Golinkoff & Hirsh-Pasek, 2016); (2) a sense of accomplishment related to engaging in critical thinking and creative problem-solving; (3) overall strengthening of positive emotion, engagement and positive relationships; and (4) sense of mattering

Intervention process

- Flourishing Leader to provide an overview of problem-based and collaborative learning and positive impact on critical thinking, executive function, self-regulation and creativity, emphasizing the importance of asking the right questions to support rational decisions
- During the session, Flourishing Leader to instruct Flourishing Partners to work together to craft solutions to social problems such as crime reduction or creating community spirit in cities
- Flourishing Partners to work in their respective pairs or team up with another pair to make a group of four participants, should they so choose
- Teams to spend the session conducting internet research on the social problem, brainstorming on solutions and summarizing their strategy for addressing the problem.

- Teams to present their ideas to the group at the end of the session.
- Following the session, teams may write up their strategies in a brief to send to their elected officials.
- Before the following session, Flourishing Partners will discuss the learning experience, its challenges in benefits and continue to look for opportunities for problem-based and collaborative learning in their lives.

Helpful resources

- Boud & Filetti, 2013
- Ding et al., 2014
- Golinkoff & Hirsh-Pasek, 2016
- Goldin et al., 2014
- Hurley, 2017
- Jaeggi et al., 2008
- Kienitz et al., 2014
- Prilleltensky, 2016
- Tiwari et al., 2006
- West et al., 2016

# Appendix G

## Mind-body Connection and Mindfulness Practice Intervention

Activity – mindfulness meditation practice

Active ingredient – attention to thoughts in mind and physical sensations and feelings in body

Target system – attention, feelings, thoughts, behavior

Target change – greater understanding of and sense of control over feelings, thoughts and behaviors; ability to shift our emotional states; decreased intensity of negative feelings;

Desired outcome(s) – greater well-being achieved through greater problem-solving and creative capacities, strengthened self-regulation, ability to shift out of negative emotional states, and capacity to enjoy positive emotions and feelings

Intervention process

- Flourishing Leader to provide an overview of the benefits of a mindfulness practice on the mind-body connection and self-regulation and demonstrate a mindfulness meditation exercise.
- A nine-minute audio recording called *Focused Attention Meditation with Rich Fernandez* found on www.mindful.org (Fernandez, 2018) is provided as an example.
- Participants to practice this mindfulness meditation daily between sessions.
- Flourishing Partners to provide support to one another to establish this new behavior and share the benefits and challenges they encounter with the process.
- At the following session, Flourishing Leader will facilitate a discussion about participants' experiences with mindfulness meditation and help them identify common themes and strategies to overcome challenges

Helpful resources

Carver & Scheier, 1990

Dalebroux et al., 2008

Fredrickson, 2012

# Appendix H

## Awareness and Avoidance of Thinking Traps Intervention

Activity – examining beliefs that result in thinking traps and strategizing alternative beliefs with Flourishing Partners

Active ingredient – attention to beliefs about adverse events and their impact on behavior and situational outcomes

Target system – attention, beliefs, behavior

Target change – awareness of thought processes and beliefs that lead to thinking traps; greater potential to avoid thinking traps in future situations

Desired outcome(s) – greater well-being achieved through more optimistic interpretation of adverse events; strengthened resilience

Intervention process

- Flourishing Leader to provide an overview of thinking traps and their negative impact on resilience, including strategies to examine beliefs and their effect on behavior and situational outcomes (Reivich & Shatté, 2002)
- Flourishing Leader to present the thinking traps of jumping to conclusions, tunnel vision, magnifying and minimizing, personalizing, externalizing, overgeneralizing, mindreading and emotional reasoning (Reivich & Shatté, 2002) and to illustrate the importance of critical thinking in examining internal state and external environment
- Flourishing Leader to facilitate a group discussion, asking individuals to brainstorm examples and instances when they fell into thinking traps and alternative strategies to support resilience. If it is helpful, participants may think about characters and events in movies or books to illustrate thinking traps and enrich discussion.

- Between session, participants will be asked to consider how they succumb to thinking traps in their daily lives and to experiment with new ways to interpret their circumstances to produce better outcomes.
- Flourishing Partners will each share an adverse event when they fell into a thinking traps, examining thinking traps individually in the given situation.
- At the following group session, Flourishing Leader will lead a discussion with participants

Helpful resources:

A. T. Beck, 2005

Reivich & Shatté, 2002

# Appendix I

## Cultivating Protective Factors

Activity – identifying protective factors that support resilience with Flourishing Partners

Active ingredient – awareness of internal traits and dispositions and external influences such as family or institutions that support individuals in times of challenge and protect resilience

Target system – attention, beliefs, behavior

Target change – awareness of thought processes and beliefs that lead to thinking traps; greater potential to avoid thinking traps in future situations

Desired outcome(s) – greater well-being achieved through awareness and knowledge of protective factors will continue to inform participants sense of strength and self-efficacy

Intervention process

- Flourishing Leader to provide an overview of protective factors and how they prevent damage, repair damage and strengthen resilience, including biology, self-awareness, self-regulation, mental agility, self-efficacy/mastery, optimism, connection and supportive individuals, groups and institutions
- Flourishing Leader to encourage participants to identify their own protective factors, examining what is healthy and strong about themselves and what resources support them in their environment.
- Between sessions, Flourishing Partners to continue to consider protective factors in their lives and to think of examples in their daily experience when protective factors support their resilience, offering supportive listening and encouraging deeper exploration with their partners

- At the following group session, the Flourishing Leader will facilitate a group discussion on participants' experience with considering protective factors and how they can support resilience

Prompts for discussion on protective factors:

- Identify your innate and internal protective factors:
  - What are your strengths?
  - What about you is healthy and strong?
  - What about your personality helps you in the face of challenges?
  - What are you good at?
  - What do people admire about you?
- Identify your external protective factors:
  - What are the resources around you?
  - Who or what has helped you in your past?
  - What new people or things in your life might you see as a resource in times of challenge?
  - What kinds of people or things might you like to have in your life, especially in times of struggle?
  - How might you find them?

Helpful resources

- Masten & Garmezy, 1985
- Reivich & Shatté, 2002

# Appendix J

## Physical Exercise Intervention

Activity – exploring physical exercise as a means to strengthen mind-body connection

Active ingredient – experimentation with physical exercise in daily routines

Target system – physiological and psychological states

Target change – greater awareness of feelings and sensations in body resulting from exercise and its impact on psychological state; improved physical health

Desired outcome(s) – greater well-being achieved through benefits of exercise, including better physical health, reduction in psychological distress, less anxiety and depression, greater autonomy and competence

Intervention process

- Flourishing Leader to provide an overview on the benefits of physical exercise and help participants to brainstorm ways to incorporate physical activity into their daily lives.
- Flourishing Leader might consider bringing participants on an outing to engage in physical activity, such as visiting a state park or recreation area to hike, bike or canoe. Alternatively, an outside instructor might be invited to the session to teach a fitness or yoga session.
- Flourishing Partner should consider the starting fitness levels of participants, make the group activity accessible for all, and possibly recommend (or require) that participants receive a physician's clearance for exercise prior to the session.
- Between sessions, participants to experiment with incorporating physical exercise into their daily routines and share with their Flourishing Partners about successes and challenges relating to establishing habits and continuing with their exercise routine

- Flourishing Partners to exchange ideas for how to enjoy exercising and to savor the sense of pride and accomplishment in meeting their exercise goals
- Flourishing Leader to facilitate a similar discussion during the following group session and may choose to revisit the topic and intervention at later points in the Flourishing Partner program.

Helpful resources:

- Faulkner et al., 2015
- Ratey & Manning, 2014

# Appendix K

## Humanities Intervention

Activity – exploring the humanities, including music, literature and visual arts

Active ingredient – experimentation the humanities in daily life

Target system – mood, emotion, physical state, behavior, relationships, personal identity

Target change – improved mood and more positive emotion, more time spent in flow state, greater compassion for others, evolved personal narrative and posttraumatic growth

Desired outcome(s) – greater well-being achieved through engagement in the humanities, including positive emotion, positive relationships, engagement and meaning

Intervention process

- Flourishing Leader to provide an overview on the benefits of engaging with the humanities and help participants to brainstorm ways to incorporate them into their daily lives.
- Flourishing Leader will emphasize the importance of individual preference and meaning to the individual in engagement with the humanities and offer freedom to participants in choosing of the arts and humanities to which they are most responsive (Tay, Pawelski, & Keith, 2018)
- Flourishing Leader may wish to play recorded music, show a film, bring a piece of art to share or read poetry or passages from a book. The Leader may then facilitate discussion by the participants on the effects of the chosen piece, setting an example for the related homework assignment.
- Between sessions, participants to revisit art forms that they have enjoyed in the past and to consider engaging in new mediums, such as listening to music, reading literature, looking at visual art or writing or creating their own art.

- Flourishing Partners will meet to discuss the effects of the engagement with the humanities on their senses, psychological state and perceived well-being
- At the following session, Flourishing Leader will facilitate a discussion of the participants' experiences with engaging in the humanities.
- Flourishing Leader may choose to devote multiple sessions to this intervention, focusing on a particular art form and inviting participants to both appreciate the humanities or create their own art. At a minimum, one session devoted to the humanities is recommended.

Helpful resources:

- Csziksentmihilayi, 1996
- Dalebroux et al., 2008
- Dodell-Feder & Tamir, 2018
- MacDonald et al., 2012
- Pawelski & Moores, 2013
- Västfjäll et al., 2012
- Tay, Pawelski, & Keith, 2018

# Appendix L

## Goal-setting and Grit Intervention

Activity – envisioning goals of recovery relating to health and growth, affiliation, relationships, community contribution and generativity

Active ingredient – sense of personal meaning and self-concordance with goals

Target system – attention, awareness of goals

Target change – greater commitment and persistence toward goals (grit), sense of autonomy and intrinsic motivation for recovery from addiction, less chance for relapse

Desired outcome(s) – greater well-being achieved through strengthened intrinsic motivation, autonomy and self-efficacy needed for the grit and persistence for recovery; ultimately, providing greater engagement in and meaning about recovery process

Intervention process

- Flourishing Leader to provide an overview on goal-setting and grit and provide a visioning exercise to help participants to imagine a drug- and alcohol-free future and the positive impact their health and relationships and pursuit of personal interests
- Between sessions, participants to develop their visions with the support of Flourishing Partners, creating detail as to how they will enjoy their newfound health, new and repaired personal relationships, and achievement of personal development and growth
- At the following session, Flourishing Leader to facilitate a discussion with participants about their visioning process and how they can continue to build on their vision for recovery

Helpful resources:

- Duckworth et al., 2007
- Ryan et al., 2008

- Sheldon & Houser-Marko, 2001

# Appendix M

## Optimism and Hope Intervention

Activity – exploration of current explanatory style relating to recovery from addiction and future

Active ingredient – identification of current explanatory style and imagination of shifted explanatory style

Target system – attention, awareness, insight and imagination

Target change – more optimism and hope about recovery from addiction and future, improved mood, better morale, greater perseverance and problem-solving relating to recovery

Desired outcome(s) – greater well-being achieved through optimistic and hopeful outlook, ultimately leading to positive emotion, greater meaning about and greater engagement with recovery process

Intervention process

- Flourishing Leader to provide an overview on optimism and hope and offer question prompts for participants to ask their Flourishing Partner to explore their own explanatory style
- Flourishing Partners to listen for opportunities to help their partner shift their explanatory style from negative to positive, helping them imagine a positive outcome to a challenging situation.
- Between sessions, Flourishing Partners to continue their conversation about current and shifting explanatory style
- At following session, Flourishing Leader will facilitate a group discussion with participants on their experiences with shifting explanatory style to one of optimism and hope

Helpful resources:

- Peterson & Steen, 2009

# Appendix N

## Additional Resources for Positive Interventions

Rashid and Seligman's *Positive Psychotherapy: Clinician Manual* (2018) offers a rich foundation and comprehensive guide to cutting-edge practice and research of positive psychotherapy. Flourishing Leaders are encouraged to reference this seminal work for state-of-the-science positive interventions, which may supplement those proposed in the Flourishing Partner model. In cases where the Flourishing Partner interventions are not impactful, the interventions proposed by Rashid and Seligman (2018) may provide effective alternatives. Several of these interventions may be of particular benefit in a peer support format, as follows:

- Positive Introductions – Flourishing Leaders may ask participants to share about a time when they were at their best or a high point in their lives, helping to override a personal narrative based on past failures and weaknesses. Positive introductions may be used at the start of the Flourishing Partner program and revisited in subsequent sessions.
- Gratitude Journal – Participants may be asked to keep a daily journal of people, places and things for which they are grateful for in their lives. Benefits of this practice include building self-worth and self-esteem by counteracting a sense of victimhood, better coping with stress as life circumstances are reevaluated, and better relationships by raising awareness of the value of the people in our lives. Flourishing Leaders may ask participants to share passages from their gratitude journal with their Flourishing Partners and in group sessions.
- Forgiveness Letter – Flourishing Leaders may introduce the concept of forgiveness of others as means to promote well-being for themselves. Through the REACH process (Rashid & Seligman, 2018), participants may be asked to recall a past transgression by someone on

them, to empathize with the transgressor, to consider the altruistic nature of forgiveness, to commit to forgiveness in some public way such as writing a forgiveness letter, and to hold onto the commitment of forgiveness going forward. Flourishing Partners may discuss their experience with writing their forgiveness letters one-on-one and in group sessions.

- Gratitude Letter and Gratitude Visit – Participants may be asked to think of someone in their lives for whom they are grateful, but to whom they have never fully expressed their thanks. The benefits of sharing gratitude by sending the letter, or as possible, sharing the letter in person, include strengthened relationships and the cultivation of positive emotion. Flourishing Leaders may guide participants in preparing the letter or visit and encourage participants to share about their experience with their Flourishing Partner and in the following group session.
- Savoring Practice – Flourishing Leaders may guide participants to savor or appreciate a positive experience by mindfully recalling the emotions, physical sensations and thoughts related to the experience. Flourishing Partners may savor positive experiences together, offering an opportunity to strengthen the relationship and to practice the discipline involved in holding an experience in mind, increasing the likelihood that the savoring practice will be continued by participants in the future.
- Love & Kindness Meditation – For the mindfulness meditation intervention, Flourishing Leaders may present participants with the Love & Kindness Meditation offered by Rashid & Seligman (2018), which focuses on bringing feelings of love, kindness, openness and acceptance first to ourselves, and then expanding it to our social circles of family, friends and colleagues, and beyond. Benefits of the practice include building positive emotion and cultivating our higher aspirations of well-being for not only ourselves, but for humanity and all

living things.

# Appendix O

## Measurement

The Flourishing Partner model will benefit from evaluation, and recommendations for measurement include administration of the PERMA profiler (Butler & Kern, 2016) and qualitative feedback through the Voice of the Flourishing Partners format, with a tracking system provided by Parsons, Gokey, & Thornton (2013).

**PERMA-profiler**

- A free version of the measure may be found here: https://www.authentichappiness.sas.upenn.edu/questionnaires/perma
- The PERMA-profiler measures the 15 items measuring the five components of the PERMA model: positive emotion, engagement, positive relationships, meaning and accomplishment (Seligman, 2011), as well as eight items measuring negative emotion, loneliness, health, and overall happiness.
- Respondents rate their agreement with the 23 statements on an eleven-point scale from 0 – 10 from not at all to completely and receive a profile on the five PERMA components and four additional measures of negative emotion and health.
- Before the start of the Flourishing Partner program, Flourishing Leaders may administer the PERMA-profiler (Butler & Kern, 2016), and again at the end of the program
- It is hoped that Flourishing Partners will see improved scores on the PERMA-profiler after participation in the program.

**Voice of the Flourishing Partners**

- At intervals in the Flourishing Partners program, participants will be given an opportunity to

evaluate the Flourishing Partner program through one to one conversation with the Flourishing Leader, video blog, or written feedback using the Voice of the Flourishing Partners form below.

- While the Flourishing Leader may determine the intervals for requesting feedback through the Voice model, it is recommended that feedback is provided at the beginning of the model, after the Problem-based and Collaborative Learning Intervention (the mid-point of the program), and at the end of the program.
- Communication should be kept confidential and/or anonymous, as desired by participants.

**Voice of the Flourishing Partners form:**

We would like to hear from you about your experience with the Flourishing Partners program. Would you please share your thoughts? A sentence or two is fine, or feel free to provide more detail.

1. What would you like to tell us about your experience with the Flourishing Partners program?

2. What has been your experience with the interventions? Please rate your experience on a scale of 1 to 5, with 1 representing not helpful and 5 representing very helpful.

| | |
|---|---|
| Meaning and posttraumatic growth | 1 2 3 4 5 |
| Character strengths | 1 2 3 4 5 |
| Active Constructive Responding (ACR) | 1 2 3 4 5 |
| Hive behavior | 1 2 3 4 5 |
| Flow and engagement | 1 2 3 4 5 |
| Problem-based and collaborative learning | 1 2 3 4 5 |
| Strengthening mind-body connection and mindfulness meditation | 1 2 3 4 5 |
| Avoiding thinking traps | 1 2 3 4 5 |

| | |
|---|---|
| Cultivating protective factors for resilience | 1 2 3 4 5 |
| Physical exercise | 1 2 3 4 5 |
| The humanities – music, visual art, literature | 1 2 3 4 5 |
| Goals and grit | 1 2 3 4 5 |
| Cultivating optimism, hope and positive prospection | 1 2 3 4 5 |

3. Please add detail about any interventions you found particularly helpful or not helpful.

4. Tell us about your Flourishing Partner relationship. Has it been helpful to have a partner with whom to reflect?

**Summarizing impact**

- To summarize the program evaluation, Flourishing Leaders may use a system offered by Parsons, Gokey and Thornton (2013) to monitor inputs, activities, output, outcomes and impact:


*Figure 2.* Evaluation process. From "Indicators of inputs, activities, outputs, outcomes and impacts in security and justice programming," by J. Parsons, C. Gokey, & M. Thornton, 2013, (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/304626/Indicators.pdf)

- Inputs: The capacity added to the organization or group to implement the Flourishing Partners program. These could include the time and effort of the Flourishing Leader to learn about and prepare for the program, guests invited to group sessions and identification of potential outings relating to the interventions.
- Activities: The planned interventions designed to meet the Flourishing Partners program objectives, as defined in the model and delineated in Appendices A – M.

- Outputs & Indicators: the tangible and intangible products that result from Flourishing Partners program activities. These include the written, verbal and creative work of the participants.
- Outcomes: the benefits that the Flourishing Partners model is designed to deliver, including improved scores on PERMA-profiler, self-reports of positive outcomes by Flourishing Partners and observations of benefits by the Flourishing Leader.
- Impacts: the higher-level goals achieved by the Flourishing Partners model, including lowered relapse rates and improved well-being for the participants.